```
TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       64, Appl
64, Appl
150, Appl
1150, Appl
111, Appl
101, Appl
101, Appl
1119, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24, Appl
14898, A
1, Appli
                                                                                                                                                   August 17, 2005, 22:08:26 ; Search time 243 Seconds (without alignments) 8073.645 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 36, App.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                 1 ggaactaaaaaagaacttta.......cgggcttcccgcccaccgg 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4
Sequence 1
Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2405568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Issued Patents NA:*

'cgn2 6/ptodata1/ina/5A_COMB.seq:*
'cgn2 6/ptodata1/ina/5B_COMB.seq:*
'cgn2 6/ptodata1/ina/6A_COMB.seq:*
'cgn2 6/ptodata1/ina/6B_COMB.seq:*
'cgn2 6/ptodata1/ina/RB_COMB.seq:*
'cgn2 6/ptodata1/ina/PCTUS COMB.seq:*
'cgn2 6/ptodata1/ina/PCTUS COMB.seq:*
5.1.6
Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-461-912A-36
US-09-513-999C-14898
US-10-000-489-1
US-09-319-913-64
US-09-319-913-64
US-09-313-294A-4020
US-09-313-294A-4020
US-09-313-294A-4020
US-09-313-294A-4020
US-09-313-294A-4020
US-09-919-016-5370
US-09-919-016-5370
US-09-919-016-5370
US-09-919-016-5370
US-09-919-016-5370
US-09-919-016-5370
US-09-919-016-5370
US-09-919-016-5370
US-09-919-016-5370
US-09-919-018-183
US-09-919-018-183
US-09-949-016-13904
US-09-643-597-308
US-09-643-597-308
US-09-643-597-308
US-09-643-597-308
US-09-644-518-308
US-09-66-421B-308
US-09-66-421B-308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1202784 segs, 818138359 residues
GenCore version
Copyright (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                       nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                  IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         length: 0
length: 2000000000
                                                                                                                                                                                                                                                             US-10-735-577-16
1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
Match 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sed
                                                                                                                                                                                                                                                           Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                                       ı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB
Maximum DB
                                                                                                       OM nucleic
                                                                                                                                                                                                                                                                                                                    Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                           Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Result
No.
```

APP		2,	60	120	180
281, App 281, App 3, Applis 3, Applis 3, Applis 3, Applis 1, Appli	ν Φ	Gaps	ATCAA	FTATT FTATT	TTCTATGGGGAAGCTGTGGG
	states	2;	AAAA 	GATT	AGCTC
Sequence Seq	នease	649; 8	AATAC	AGTTA AGTTA	CTCATGAAATCCTTCTATGGGGGAAGCTGTGG
	n dì	Length Indel	PAAC 	TGAG	TATE
r n	use of genes 1.	8; 0; 0;	SATGO	TCAAA	CCTTC
-281 -3 -3 -3 -3 -3 -3 -1483 -11483 -11483 -11483 -11585 -11585 -1	ზ	DB 4; 9e-14	AGGG	SCTTG SCTTG	TGAAAT
1833 - 18		1; DI . 2.9(tches	75995 		TCATION TO THE
99-9-37 99-9-37 99-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9	H & D W H	re 601; D d. No. 2.9 Mismatches	TTGA 	CTTT	
US-09-370-838-2 US-08-854-133-2 US-08-190-560-3 US-08-468-946-3 US-08-468-942-3 US-08-949-016-1 US-09-949-016-1 US-08-190-560-1 US-08-190-560-1 US-08-190-560-1 US-08-190-560-1 US-08-190-105-1 US-08-190-105-1 US-08-322-198B-1 US-08-322-198B-1 US-09-736-457-1 US-09-736-457-1	ALIGNN 461912A 461912A for detect tially exp 5/09/461, ⁹ 60/113, ⁰ 8 8 Version	Score Pred. 0; Mis	ATTI ATTI		TCCTGATCTG
	uS/0946: wrence A yler ah L. thods fol thod thods fol thod thods fol thod thod thod thod thod thod thod thod	18; 78;		TTAA 	
886338 527 527 527 579 579 303 303 303 452 452 452 392 392 392	ion Jord Jord Jose NUN NUN NUN NUN NUM HBB 1999	50.1%, larity 99.7%, Conservative	ggaactaaaaagaactttatttatgagggaaggggatgcaaacaatacaaaatcaa 	aagcttatctggtatttaacttttgtgttggtggtgaaatgagagttagattttatt 	TGCTAAGTGTC
	912A-36/C 36, Application 10. 6709855 INFORMATION: NT: Stanton, La NT: White, R. I NT: Lewicki, Jo NT: Lewicki, Jo NF INVENTION: Me PERENCE: SCIOS. *APPLICATION NUMBE TILING DATE: 199 OF SEQ ID NOS: E: FastSEQ for 70 36 O 36 I: 649 DNA SM: Homo sapiens EE: E. EE: E. SEX: CDS ON: (113)(405 912A-36	arity Onser	TAAP	rtato tato	TTA
	SULT 1 -09-461-912A-36/c Patent No. 6709855 GENERAL INFORMATION: APPLICANT: Stanton APPLICANT: Stanton APPLICANT: Dewicki TITLE OF INVENTION: TITL	Simile	3GAA	AAGC 	TTTA
######################################	912A- 1 36, 1 INFOR INT: INT: INT: INT: INT: INT: INT: PERENEW FIREREW F	al S 623	1 (61	121
	SULT 1 -09-461-912A gequence 36, Batent No. 6 BEREAL INFC APPLICANT: APPLICANT: APPLICANT: TITLE OF IN. TITLE	Query Match Best Local Matches 62			
00000000000000044444 80010040000004444	0, 10, 10, 1	Query M Best Lo Matches			
	REE UNS UNS UNS UNS	~ m m	9 9	65 G	ે દ

g

요 ò 8 8

ò

8 6

a

à 셤

ò

```
221
                                                                                                                      420
                                                                                                                                                  220 TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTTCCAAAAATCCA 161
                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                            160 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 101
                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  83
                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                  280 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                             100 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301 GTGAGGCCCGCAATTAGGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                      361 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                          421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      %309-513-999C-14898/c

% Sequence 14898, Application US/09513999C

% Patent No. 6783961

GENERAL INFORMATION:

APPLICANT: Dunas Milne Edwards, J.B.

APPLICANT: Dunas Milne Edwards, J.B.

APPLICANT: Glordano, J.Y.

TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.

FILE REFERENCE: 59.US2.REG

CURRENT APPLICATION NUMBER: US/09/513,999C

CURRENT APPLICATION NUMBER: US 60/122,487

PRIOR FILING DATE: 1999-02-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 582;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541 TIGGIGICGICCGTIGAAGCCTTGGCCGAGGCGCGCGCGCAC 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40 TTGGTGTGGTCGTTGAAGCCTTGG-CGAGGCGCGGCGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
43.6%; Score 523; DB 4; I
Best Local Similarity 97.9%; Pred. No. 9.6e-128;
Matches 547; Conservative 4; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: r=a or g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 14898
LENGTH: 582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapiens
FEATURE:
NAME/KSY: misc_feature
LOCATION: 2
OTHER INFORMATION: n=a, g
FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
NAME/KEY: misc_feature
LOCATION: 126
O'THER INFORMATION: r=a O:
FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: 114 TOTHER INFORMATION: y=c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
NAME/KEY: misc_feature
LOCATION: 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: k=g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-513-999C-14898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                              유
                                                                                                                   ð
                                                                                                                                                                        g
                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                       GCGAATITGIGAAIGIAAACAICAIGGITICCAIGGCGIGIICCAITIGAGAIGGCAII 540
                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 291
                                                                                                                      420
                                                                                                                                                  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTATCCCCA 480
                                                                                                                                                                                                                                                                      GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATTTTCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tresterectecerreaageerreseceaageegeegeegeegeegeegeegag 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 AAGCTTATCTGGTATTTAACTTTTCTTTCTTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITACAITITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   341
                                                                                                                                                                                                                                                                                                                                                                                                                  GCGAATTIGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rcreccracrrcrrcccrrcrecrrcargreraracaaaaragrcarrecarecaare 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGGTGTGCTTGAAGCCTTGG-CGAGGCGCGGCGAGCGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCTT
GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                   TCCAGGTCCTTCATTATTTTGTCCACAGGCCCAGGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Stanton, Lawrence A. APPLICANT: White, R. Tyler APPLICANT: White, R. Tyler APPLICANT: Damm, Deborah L. APPLICANT: Damm, Deborah L. APPLICANT: Lewicki, John A. TITLE OF INVENTION: Methods for detection and use of TITLE OF INVENTION: differentially expressed genes in disease states FILE REPERENCE: SCIOS.011A CURRENT APPLICATION NUMBER: US/09/461,912A CURRENT FILING DATE: 1999-12-15 PRIOR FILING DATE: 1999-12-18 NUMBER OF SEQ ID NOS: 48 NUMBER OF SECO ID NOS: 48 NUMBER OF SECO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             46.5%; Score 557; DB 4; Length 579;
99.7%; Pred. No. 1.1e-136;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGACGCGGGGGGAGAGCGAGC 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             crecacececeaagaceage 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-461-912A-24/c
; Sequence 24, Application US/09461912A
; Eatent No. 670985;
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 579; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-461-912A-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 24
LENGTH: 579
301
                                                        350
                                                                                                                   361
                                                                                                                                                                           290
                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                               230
                                                                                                                                                                                                                                                                                                                                                                                                                  170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   340
                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
```

엄

ठ

a

ઠે g à

ò

g

ò Q ö

```
1773
                                                                                                                                                                                                                                                                                                                                                                                                                              1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1592 AATGTAAACATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGCTCC 1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1772 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1712 ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   552
                                                                                                                                                                                                                                      2012 TITITITITITITITICTITCTCTGCTTGTCAATGAGAGTTAGATTTTACATTTGCT
                                                                                                                                                                                                                                                                                                                           1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCGACCCTTTGGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:

APPLICANT: Rhodes, Kenneth
APPLICANT: Betty, Maria
APPLICANT: Betty, Maria
APPLICANT: Betty, Maria
APPLICANT: Ling, Haai-Ping
APPLICANT: An, Wenqian
TITLE OF INVENTION: POTASSIUM CHANNEL INTERACTORS AND USES THEREFOR
FILE REFERENCE: MNI-070CP2
CURRENT APPLICATION: POTASSIUM CHANNEL INTERACTORS AND USES THEREFOR
FILE REFERENCE: MNI-070CP2
CURRENT FILING DATE: 1999-09-21
EARLIER APPLICATION NUMBER: USSN 60/110,277
EARLIER APPLICATION NUMBER: USSN 60/110,033
EARLIER APPLICATION NUMBER: USSN 60/109,333
EARLIER PILING DATE: 1998-11-20
EARLIER PILING DATE: 1999-11-20
EARLIER PILING DATE: 1999-01-33
EARLIER PILING DATE: 1999-04-23
EARLIER PILING DATE: 1999-07-09
EARLIER PILING DATE: 1999-07-09
EARLIER PILING DATE: 1999-07-09
EARLIER PILING DATE: 1999-07-09
                                                                                                                                                                                                                73 TATITAACTITICITICICICCTIGICAAATGAGAGTTAGATTTTATATATTTGCT
                                                                                                                                                                                                                                                                                                133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                    193 AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Grigaadccacagaggcrcagrdcgaggrcrcggdaggaagaaaggr 1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       553 GTIGAAGCCTIGGCCGAGGCGCGGCGACGCTGGGCGAGCT 602
                                                                                                                                                                      ;
0
                                                                                                                            Length 2016;
                                                                                                                                                                      28; Indels
                                                                                                                            DB 4;
                                                                                                                          Score 485.2; DB 4,
Pred. No. 1.5e-117,
0; Mismatches 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 64, Application US/09399913 ; Patent No. 6361971
                                                                                                                            40.5%;
                                                                                                                                                Best Local Similarity 94.7
Matches 502; Conservative
NAME/KEY: polyA_signal
LOCATION: 1965..1970
NAME/KEY: polyA_site
LOCATION: 2001..2016
      ; NAME/KEY: po;
; LOCATION: 190;
; NAME/KEY: po;
; LOCATION: 200;
US-10-000-489-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               373
                                                                                                                                                                                                                                                                                                                                                                                                                                 1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     493
                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                ò
                                                                                      209
                                                                                                                                                                                                                                                                                                                                            389
                                                                                                                              405
                                                                                                                                                                      269
                                                                                                                                                                                                                                                          329
                                                                                                                                                                                                                                                                                                285
                                                                                                                                                                                                                                                                                                                                                                CTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGC 225
                                                                                                                                                                                                                                                                                                                                                                                                                                 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGAGGGTC--TTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTAG 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGGTGGTCCCTTGAAGCCTTGGCCGA 47
                                                                                                                                                                    CATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCTTT--GACA
  TCTGCTTGTCAAATGAGAGTTAGATTTTTATTTTTACATTTGCTAAGTGTCCTGATCTGCT
                            TCTGCTTGTCAAATGAGAGTTAGATTTTTATTTTACATTTTGCTAAGTGTCCTGATCTGCT
                                                                                    CATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACA
                                                                                                                                                                                                                                                        GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCT
                                                                                                                                                                                                                                                                                   GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                            CTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: BENJANII, SUEDINALE
APPLICANT: TANAKA, HINCAKI
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US6.DIV
CURRENT APPLICATION NUMBER: US/10/000,489
CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: PCT/IBOL/01715
PRIOR APPLICATION NUMBER: PCT/IBOL/01715
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-07-03
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Sequence 1, Application US/10000489; Patent No. 6794363; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCGCGCCGCACGCTGGGC 588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Benjanin, Stephane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: 5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: 1..1434
NAME/KEY: CDS
LOCATION: 1435..1836
NAME/KEY: 3'UTR
LOCATION: 1837..2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 4
US-10-000-489-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 2016
90
                                                                                  150
                                                                                                                            462
                                                                                                                                                                      210
                                                                                                                                                                                                              404
                                                                                                                                                                                                                                                        270
                                                                                                                                                                                                                                                                                                344
                                                                                                                                                                                                                                                                                                                                          330
                                                                                                                                                                                                                                                                                                                                                                                    284
                                                                                                                                                                                                                                                                                                                                                                                                                              390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               46
                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                   Q
                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                  ò
                                                                                                              엄
                                                                                                                                                         ò
                                                                                                                                                                                                                                        ठे
                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
```

```
450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 168 GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCTTTGTCAAGTAGTTTTTTTCCCCTGC 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            542
                                                                                                                                                                                                                                                                                                                                                                                                                                               510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 288 GAGCCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          228 CAGGTCTTTCATTATTTTGTCCACAGGCGAGGGTCCTTTTGATTTTCCAAAAACCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                      7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                               67 ATCTGGTAT----TTAACTTTTCTTTCTCTGCCTTGTCAAATGAGAGTTAGATTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGATICCITAAGCGACCCITIGGGACAACTCITAICAGGGAGGAGCGAACTGCICATITC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        404 AGATTCCTCAGTTGACCCCATGGGAGAGGACGCATCAAGGTGTGGGTACCAGGGC----T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      243 IGCCIACTICTICCCTICTGCTICATGTGTACAAAATAGTCATTGCATGCAATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGGICCITCATIAITITGICCACAGCCAGAGGGICTITITGATITICCAAAAAICCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              483 GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     108 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               123 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGCCCCCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Stanton, Lawrence A.
APPLICANT: White, R. Tyler
APPLICANT: White, R. Tyler
APPLICANT: Damm, Deborah L.
APPLICANT: Lewicki, John A.
TITLE OF INVENTION: Methods for detection and use of
TITLE OF INVENTION: differentially expressed genes in disease states
FILE REFERENCE: SCIOS.011A
CURRENT APPLICATION NUMBER: US/09/461,912A
CURRENT FILING DATE: 1999-12-15
                                                                                                                                                                                                                                                                                                                                                        24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   543 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAG 591
                                                                                                                                                                                                                                                                                                                 Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCTTTGGAAG 1
                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                             Score 329.8; DB 4;
Pred. No. 7.3e-77;
0; Mismatches 107;
EARLIER FILING DATE: 1998-11-25
EARLIER APPLICATION NUMBER: USSN 60/109,333
EARLIER FILING DATE: 1998-11-20
NUMBER OF SEQ ID NOS: 72
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 64
LENGTH: 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-461-912A-23/c
; Sequence 23, Application US/09461912A
Patent No. 6709855
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 77.8%;
Matches 458; Conservative C
                                                                                                                                                                                                                        ; NAME/KEY: CDS
; LOCATION: (52)..(336)
US-09-350-614-64
                                                                                                                                                      TYPE: DNA
ORGANISM: Rattus
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 303
                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                           510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCTTGTCAAGTAGTTTTTTCCCCTGC 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          542
                                                                                                                                                                                                                                                                                                                                                                                                                                             Crcrercarregarraacrrrrcrrrcrcrecrrerceaarregagricgarerrrre 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACATTTCCTAAGGGTCCTGATCTGCTCA------CAGGAAGCAGTGGGGGC 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGATTCCTTAAGCGACCCTTTGGGACAAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGCCCCCCCACTAGTGATAGAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGGTCTTTCATTATTTTGTCCACAGCCAGAGGGTCCTTTTGATTTTCCAAAAACCCCAGG 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   108 AAACCIGIGAAAAIGTAAGCAICAIGAITICCAIGCACCAIGCICCATTIGGGAIGTTIT 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGATTCCTCAGTTGACCCCATGGGAGAGGACGCATCAAGGTGTGGGTACCAGGGC----T
                                                                                                                                                                                                                                                                                                                                                        569 AAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                      123 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ccagirescciracticificacticarsfactacaaaarastcariscarscarsar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAATTIGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:

APPLICANT: Rhodes, Kenneth
APPLICANT: Betty, Maria
APPLICANT: Betty, Maria
APPLICANT: Betty, Maria
APPLICANT: Ling, Hual-Ping
ITILE OF INVENTION: POTASSIUM CHANNEL INTERACTORS AND USES THEREFOR
ITILE OF INVENTION: POTASSIUM CHANNEL INTERACTORS AND USES THEREFOR
ITILE OF INVENTION: POTOSSIUM CHANNEL INTERACTORS AND USES THEREFOR
ICURRENT APPLICATION NUMBER: US/09/3298,731
EARLIER APPLICATION NUMBER: USSN 60/110,277
EARLIER PILLING DATE: 1998-04-23
EARLIER APPLICATION NUMBER: USSN 60/110,277
EARLIER APPLICATION NUMBER: USSN 60/110,033
                                                                                                                                                                                                                                                                                                                 7 AAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                    24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCCGAG 591
                                                                                                                                                                                                                             Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 329.8; DB 3; Length
Pred. No. 7.3e-77;
0; Mismatches 107; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 64, Application US/09350614
Patent No. 6689581
                                                                                                                                                                                                                           27.5%;
77.8%;
                                                                                                                                                                                                                                                                      Conservative
  SOFTWARE: Patentin Ver. SEQ ID NO 64
                                                                                                             ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (52)..(336)
US-09-399-913-64
                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 458; Conserv
                                                                                         ORGANISM: Rattus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-350-614-64/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                 509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48
                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          303
```

a ò 원

셤

\$ A à ద ò 8 ð g ò 셤

े

용

à g

Š

Gaps

5

Indela

Length 276;

or other

438

498

```
217 TGTCCACAGGCCAGAGGGTCCTTTTGAATTTTCCAAAAACCCAGGGAACTCCCTTTCCATG 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGTTGAA 558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                157 AGCACTCTCAGGTCCTCCTTTGTCAAGTATTTTTCCCCTGCAAACCTGTGAAATGTA 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97 AGCATCATGGTTTCCATGGCATGCTCCNATTTGGATGGCATTTTGAAGAATCTGTTGAA 38
                                                                                                                                                                                                                                                                                               276 ATAGAAAGCTCTGGAAGCCCACTTT-CCATCTCGGCACTGGTCCTTTCATTATTT
                                                                                                                                                                                                                                                                                                                                                           380 TGTCCACAGCCAGAGGGTCTTTTTG-ATTTTCCAAAAATCCAGGGAACTCCTTTTCCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGCGAATTTGTGAAATGTA
                                                                                                                                                                                                                                                                      320 AAAAGAAGCTCTGGAAGCCCACTTTGCCATCTTTTGCAGGT
FEATURE:
NAME/KEY: misc feature
OTHER INFORWATION: Incyte ID No. 6476212 700347548H1
NAME/KEY: unsure
LOCATION: 70
                                                                                                                                                                              Query Match 13.7%; Score 164.8; DB 4; Best Local Similarity 79.9%; Pred. No. 1.4e-33; Matches 218; Conservative 0; Mismatches 53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               559 GCCTTGGCCGAGGCGCGGCGACGCTGGGCGAG 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          37 ACCIGGCCCTGAGCCCCTGCAGTCTTTGGAAG
                                                                                                         CTHER INFORMATION: a, t, c, g, US-09-313-294A-4020
                                                                                                                                                                                                                                                                                                                                                                                                                                                  439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         499
                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                        561 AAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGGTC 502
                                                                                                                                                                                                                                                                                                                                                                                                    67 AICTGGTAT----TTAACTITICTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATTTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                             501 crcristcarraacrrrrcrrrcrcrecrrsrcaarregagrrgargrrarrrg 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TACATITICCIAAGTGTCCTGATCTCCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     441 cacarrrccraagggrecrearcrecrearcrecrea------caggaagcagreege 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          396 AGATTCCTCAGTTGACCCCATGGAGGACGCATCAAGGTGTGGGTACCAGGGC---T 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        243 IGCCIACTICITICCCTICIGCTICATGITACIACAAAATAGICATIGCAIGCAAIGGI 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGGTCCTTCATTATTTTGTCCACAGCGCTCTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 483 GAATITGIGAAATGIAAACATCATGGITTCCATGCGTGTTCCATTTGAGATGGCATTTT 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 340 ccagirggcciacricircricircargraciacaaaaaacarigcargcaaagar 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    280 GAGCCCCCCCACTAGTGATAGAAAGCTCTGGAAGCCCCACTTTTCCATCTCGGCACTGGTC 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7 AAAAAAGAACTTTATTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTT 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100 AAACCTGTGAAATGTAAAGCATCATGGTTTCCATGGCATGCCATGCCATTTT 41
                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                   24;
                                                                                                                                                                                                                        Query Match 27.4%; Score 328.4; DB 4; Length 570; Best Local Similarity 78.4%; Pred. No. 1.7e-76; Matches 453; Conservative 0; Mismatches 101; Indels 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        543 GGTGTGGTCGTTGAAGCCTTGGCCGAGGCGCGGGA 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40 GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCA 4
                                       NUMBER OF SEQ ID NOS: 48
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 23
LENGTH: 570
PRIOR APPLICATION NUMBER: US 60/113,008
PRIOR FILING DATE: 1998-12-18
                                                                                                                                ; TYPE: DNA
; ORGANISM: Rattus rattus
US-09-461-912A-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         423
                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5 GCAANNAAAAAAAACTTTTTTTTTTTTTGGGGNNGGGGNTGCNANCNATNCAAAATCAA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGAACTAAAAAGAACTTTATTTATTGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 509;
                                                 GENERAL INFORMATION:

GENERAL INFORMATION:

TITLE OF INVENTION: NOUTEL HUMAN GENES AND GENE EXPRESSION

TITLE OF INVENTION: NOUTEL HUMAN GENES AND GENE EXPRESSION:

TITLE OF INVENTION: PRODUCTS: II

FILE REFREENCE: COTANA-260XX

CURRENT APPLICATION NUMBER: US/09/385,982

CURRENT FILING DATE: 1999-08-30

EARLIER APPLICATION NUMBER: 60/117,393

EARLIER APPLICATION NUMBER: 60/117,393

EARLIER PILING DATE: 1999-01-27

EARLIER FILING DATE: 1998-08-31

NUMBER OF SEQ ID NOS: 544

SOFTWARE: FESUSEQ for Windows Version 3.0

LENGTH: 509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13.7%; Score 164.8; DB 3;
70.9%; Pred. No. 1.9e-33;
iive 0; Mismatches 79;
                   Sequence 150, Application US/09385982 Patent No. 6262334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature

// LOCATION: (1)...(509)

// OTHER INFORMATION: n = A,T,C or

US-09-385-982-150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 13.7
Best Local Similarity 70.9
Matches 195; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapiens
-09-385-982-150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

APPLICANT: Lalgudi, Raghunath V.
APPLICANT: Lalgudi, Raghunath V.
APPLICANT: Lalgudi, Raghunath V.
APPLICANT: Ito, Laura Y.
APPLICANT: Sherman. Bradley K.
TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN EAR FILE REPERENCE: PL-0017 US
CURRENT APPLICATION NUMBER: US/09/313,294A
CURRENT FILING DATE: 1999-05-14
NUMBER OF SEQ ID NOS: 7600
SOFTWARE: PERL PROGRAM

TYPE: DNA ORGANISM: Zea mays

SEQ ID NO 4020 LENGTH: 276

Sequence 4020, Application US/09313294A Patent No. 6476212 GENERAL INFORMATION:

RESULT 8 US-09-313-294A-4020/c

ij

Gaps 6 432

543 219

임

õ a

유 ð

ઠે

```
Sequence 5370, Application US/09949016

Sequence 5370, Application US/09949016

Ratent No. 6812339

GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
CURRENT APPLICATION NUMBER: US/09/949,016

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-20

PRIOR PILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

NUMBER OF SEQ ID NOS: 207012

SOCTHARE: FRESCE for Windows Version 4.0

LENGTHARE: FRESCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280 AAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCC 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        518 TITCCTTTCTTCTACAATTGTTCTACAAGTAATCATTACAAGCAACTGTCAGAGCTGCC 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         458 ACCATGACCACGAATTCATTAAAATCCACTTCGTTGTCCTTATTGGCATCCAGGTCCTGC 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        398 ACTATCTTATCAACCAACTGGGTTTCCTTTTGGCACGAGGAATTCCGTGAGCTCTCGC 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                433 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCC------CCAGCG 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               338 TGCAGGAGCAGTTTCAGTTCCCCCTTGCTGAGCTTGAATCTCTTCCTTGCCTTGCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           373 ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 484 AATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 6.3%; Score 75.2; DB 4; Length 592; Best Local Similarity 61.0%; Pred. No. 7.8e-10; Matches 122; Conservative 0; Mismatches 78; Indels
                                                                                                                                                                                                                                                                                                                                    Length 522;
                                                                                                                                                                                                                                                                                                                                 Query Match 7.2%; Score 85.8; DB 4; Length 5 Best Local Similarity 58.1%; Pred. No. 1.2e-12; Matches 175; Conservative 0; Mismatches 117; Indels
CURRENT APPLICATION NUMBER: US/09/774,528;
CURRENT FILING DATE: 2001-01-30;
NUMBER OF SEQ ID NOS: 441
SOFTWARE: pt_F_genes Version 2.0;
SOFTWARE: pt_F_genes Version 2.0;
SOFTWARE: pt_F_genes Version 2.0;
SOFTWARE: pt_F_genes Version 2.0;
TYPE: DNO 414
CARTURE:
NAMMAKEN: CDS
LOCATION: (223)..(522)
US-09-774-528-414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-949-016-5370/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   544 G 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  218 Ġ 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-949-016-5370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                               US-09-680-420A-21/C

US-09-680-420A-21/C

Sequence 21, Application US/09680420A

Patent No. 6528362

GENERAL INFORMATION:

APPLICANT: GILAD, Shlomit

APPLICANT: GROSMAN, Avital

TITE OF INVENITON: METHOD FOR ENRICHMENT OF NATURAL ANTISENSE MESSENGER RNA

TILE REFRENCE: GILAD—2A

CURRENT APPLICATION NUMBER: US/09/680,420A

CURRENT APPLICATION NUMBER: 60/157,843

PRIOR PILING DATE: 1999-10-06

NUMBER OF SEQ ID NOS: 28

SOFTWARE: PatentIn version 3.1

SEQ ID NO 21

LENGTH: 191
                                                                                                                                                              TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                            125 TTTANATTTGCTAANGGGCCNGANCNGCNNAAAAAANCCTTTTTNGGGGAANCTTNGGG 184
                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            157 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 191;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAA 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAA 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Wang, Jian-Rui
APPLICANT: Wang, Dunrui
APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6743619e1 Nucleic Acids and
FITLE OF INVENTION: Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

8.4%; Score 101; DB 4; L
Best Local Similarity 100.0%; Pred. No. 7.4e-17;
Matches 101; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                241 TCTGCCTACTTCCCTTCTGCTTCATGTAC 275
                                                                                                                                                                                                                                                             244 TTTGCCCACTTTTTTCCCTTTTGNTTAANGGGGC 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: PCR Amplified Human US-09-680-420A-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 414, Application US/09774528 Patent No. 6743619 Patent Norbwatz INPORMATION: APPLICANT: Tang, Y. Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tang, Y. Tom
Zhou, Ping
Goodrich, Ryle
Liu, Chenghua
Asundi, Vinod
Ren, Feiyan
Zhang, Jie
Zhang, Jie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Xue, Aidong J.
Wehrman, Tom
Wang, Jian-Rui
Wang, Dunrui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
US-09-774-528-414/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                               121
                                                                                                                              181
                                                                                                                                                                              185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
```

g

ò 요 ö

. 0

```
278 CAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGC 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     289 CAAAGTACTTGTGACAGGCAGACGTGATTGCAGCCACGAACACGATGAACTCACTGAAGT 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       338 CCACTITGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGT 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCACCTGGGCATCTCCATTGGCGTCCAGGTCCTTGAGCAATTTATCCACGGCATCCTTGT 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       critirce acreticade a decerciona de contra de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCT 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGC 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cititiccacicideaggaagcciggrachccarcagcaccitcaccc 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                643 ccaccigadcaiciccariacadaiccadacariraricadacaricardi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTTCCATGAGTACTCTCAGGTCCTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5.9%; Score 71.2; DB 4; Length 860; llarity 61.2%; Pred. No. 1.1e-08; Conservative 0; Mismatches 73; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. 6673545 1422432CB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 71.2; DB 4;
Pred. No. 7.7e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 101, Application US/09919172
; Patent No. 667345
; GENERAL INFORMATION:
; APPLICANT: Faris, Mary
; APPLICANT: Turner, Christopher M.
TITLE OF INVENTION: PROSTATE CANCER MARKERS
; FILE REFERENCE: PA-0036 US
; CURRENT APPLICATION NUMBER: US/09/919,172
CURRENT FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/222,469
; PRIOR APPLICATION NUMBER: 60/222,469
; NUMBER OF SEQ ID NOS: 102
; SOFFWARE: PERL Program
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: a, t, c, g, or other US-09-919-172-101
PRIOR APPLICATION NUMBER: 60/214,870 PRIOR FILING DATE: 2000-06-28 NUMBER OF SEQ ID NOS: 108 SOFTWARE: Patentin version 3.1 SEQ ID NO 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 5.9%;
Best Local Similarity 61.2%;
Matches 115; Conservative (
                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  458 TTGTTAAG 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    109 TGGTCAGG 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 115; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-09-919-172-101/c
                                                                                                                                                                                                                                                                                                                                                               US-09-814-915A-87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 101
LENGTH: 860
                                                                                                                                                                                                                               LENGTH: 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 87, Application US/09814915A
Patent No. 6750015
GENERAL INFORMATION:
APPLICANT: Horwitz, Kathryn
APPLICANT: Richer, Jennifer
TITLE OF INVENTION: Progesterone Receptor-Regulated Gene Expression and Methods Relat
TITLE REFERENCE: 2848-39
CURRENT APPLICATION NUMBER: US/09/814,915A
CURRENT FILING DATE: 2002-03-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4686, Application US/09949016

Fatent No. 6812339

GENERAL INPORMATION:
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: CLO01307

CURRENT APPLICATION NUMBER: 00/241,755

FRIOR FILING DATE: 2000-00-20

FRIOR FILING DATE: 2000-10-20

FRIOR APPLICATION NUMBER: 60/241,755

PRIOR APPLICATION NUMBER: 60/241,755

FRIOR APPLICATION NUMBER: 60/231,498

FRIOR PILING DATE: 2000-00-08

FRIOR FILING DATE: 2000-01-03

FRIOR FILING DATE: 2000-01-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
    382 AAGAAATTGTTACAGGCCACTGTGAGAGCAGCCACAAGCACCACATACTCCTGGAAGTCC 323
                                                                                                                                                  TITIGATITICCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTT 459
                                                                                                                                                                                                                                                                                                                      278 CAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGC 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   289 CAAAGTACTTGTGACAGGCAGACGTGATTGCAGCCACGAACACGGTGAACTCACTGAAGT 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        229 ccaccraccarcracaraccarccacacitica de la contra dela contra de la contra dela contra de la contra dela contra de la contra del la contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCT 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cririrccacrerecagaagecreeragerecrecrecareageacereagerecer 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGT 397
                                                                                           ACTITIGCCATCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      %; Score 71.2; DB 4; Length 434;
%; Pred. No. 7.7e-09;
0; Mismatches 73; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                             460 GTTAAGTAGCCTTTATCCCC 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          202 crckgcrrcracrrcrccc 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 61.2<sup>3</sup>
Matches 115; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGTCAGG 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            458 TTGTTAAG 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-949-016-4686/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 14
US-09-814-915A-87/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-949-016-4686
                                                                                           340
                                                                                                                                                                                                                                                               400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  109
                                                                                                                                                                                                                                                                                                                                             셤
                                                                                      Š
                                                                                                                                                                    엄
                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                             ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                           146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      310 GCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTCCAGGTCC 369
                                                                                                                                                                                                                                                                                                                                              338 CCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGT 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 603 riroscriectrircharicreacricargirchahgaacricgreecheechgradraaccare 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           543 GCAACAAAGGCCATGAATTCCTGGAAGTCACATTCGCCGTCTCCATCATTGTCCAGTGTT 484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        370 TICATIATITIGICCACAGAGGGICITITIGATITICCAAAAAICCAGGGAACICC 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                483 recargaertrigrecacaacerecrecretrigartrecretraagaaargggaaagerea 424
                                                                                                                                                                                                                                                                                                                                                                               205 CCACTITIGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGGGGT
                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  430 TTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCC 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ricingardacricaricagnicaminerreageindecricierere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 5.4%; Score 65.2; DB 4; Length 1081; Best Local Similarity 55.2%; Pred. No. 4.5e-07; Matches 127; Conservative 0; Mismatches 103; Indels 0
                                                                                                                                                                                                                                                    DB 4; Length 205;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: LOTAING, Jeanne F.
APPLICANT: Lotaley, Debora W.
APPLICANT: Tingley, Debora W.
APPLICANT: Edwards, Carla W.
APPLICANT: Edwards, Carla W.
APPLICANT: Edwards, Carla W.
APPLICANT: Edwards, Carla W.
CURRENT ENDERNER: DA-0024 US
CURRENT FILING DATE: 2000-05-05
NUMBER OF SEQ ID NOS: 138
SOFTWARE: PERL Program
SEQ ID NO 119
LENGTH: 1081
                                                                                                                                                                                                                                                    Query Match 5.8%; Score 69; DB 4; Length 205
Best Local Similarity 88.2%; Pred. No. 2e-08;
Matches 75; Conservative 0; Mismatches 10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. 6682888 021192.8
US-09-566-921-119
                                                                                                                                                                                                                                                                                                                                                                                                                                        398 CTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   145 CTTTTTGACCACGCTATGCTCCAAG 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 119, Application US/09566921
Patent No. 6682888
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 183, Application US/09919039; Patent No. 6727066
                                                                                            u
                                                                                                                                                                               OTHER INFORMATION: n=a, g, c or t
                                                                                            g, cor
                  FEATURE:

MAME/KEY: misc_feature
LOCATION: 53
OTHER INFORMATION: n=a, cg
FEATURE:
NAME/KEY: misc_feature
LOCATION: 54
  ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
                                                                                                                                                                                                         US-09-513-999C-14895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 19
US-09-919-039-183/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-566-921-119/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               423
                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                         Sequence 466, Application US/09976594

Fatent No. 6673549

GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH STEROIDS
FILE REFERENCE: PA-0041 US
CURRENT APPLICATION NUMBER: US/09/976,594

CURRENT PELLOATION NUMBER: 60/240,409

PRIOR FILING DATE: 2000-10-12

NUMBER OF SEQ ID NOS: 1143

SOFTWARE: PERL PROGRAM

SEQ ID NO 466

LENGTH: 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            278 CAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGC 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 14895/C

Sequence 14895/C

Sequence 14895, Application US/09513999C

Patent No. 6783961

APPLICANT: Duclert, A.

APPLICANT: Duclert, A.

TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.

Patent No. 6783961

FILE REFERENCE: 59.US2.REG

CURRENT FILING DATE: 2000-02-24

PRIOR APPLICATION NUMBER: US 60/122,487

PRIOR APPLICATION NUMBER: US 60/122,487

PRIOR PILING DATE: 1999-02-26

NUMBER OF SEQ ID NOS: 36681

SEQ ID NO 14895

LENGTH: 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCACTITGCCATCICTACACIGGTCCAGGICCTICAITAITITGICCACAGCCAGAGGGI 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCT 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       caaagractrereacadecagacerearrecaeccaceaacacaareaacreacreaagr 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTTTCCACTCTGCAGGAAGCCTGGTAGCTCCTTCTCCATCAGCACCTTGAGCTCCCCT 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCACCTGGGCATCTCCATTGGCGTCCAGGTCCTTGAGCAATTTATCCACGGCATCCTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 71.2; DB 4; Length 860;
Pred. No. 1.1e-08;
0; Mismatches 73; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. 6673549 1422432CB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 205
COTHER INFORMATION: a, t, c, g, or other US-09-976-594-466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 5.9%;
Best Local Similarity 61.2%;
Matches 115; Conservative (
TTGTTAAG 465
                                             523 TGGTCAGG 516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGTTAAG 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGTCAGG 516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: unsure
                                                                                                                 RESULT 16
US-09-976-594-466/C
458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
```

σ

```
ద
                                                                                                                                                                                ò
                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
      APPLICANT: Kaser, Matthew R.
TITLE OF INVENTION: GENES EXPRESSED IN TREATED HUMAN C3A LIVER CELL CULTURES FILE REPERENCE: PA-0035 US
CURRENT APPLICATION NUMBER: US/09/919,039
CURRENT FILING DATE: 2002-09-09
PRIOR APPLICATION NUMBER: 60/222,113
PRIOR FILING DATE: 2000-07-28
NUMBER OF SEQ ID NOS: 401
SOFTWARE: PERL Program
SEQ ID NO 183
LENGTH: 962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    557 irigecrecritriziaarcreacreargireaagaacregegegegegegagaagaaceare 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCATGACTTTGTCCACAACCTCCTGCTCTTTGATTTCCTCTAAGAAATGGGAAAGCTCA 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            310 GCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCC 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TICATIATITICCCACAGCCAGAGGGICTITITICATITICCAAAAATCCAGGGAACICC 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1413, Application US/09513999C

| Sequence 1413, Application US/09513999C
| Sequence 1413, Application US/09513999C
| Sequence 1413, Application US/09513999C
| Sequence 1413, Application US/08136|
| GENERAL INFORMATION:
| APPLICANT: Duclert, A. |
| APPLICANT: Duclert, A. |
| APPLICANT: Giordano, J.Y. |
| TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins. |
| PALE REFERENCE: 59.US2.REG |
| PILE REFERENCE: 59.US2.REG |
| CURRENT APPLICATION NUMBER: US 60/122,487 |
| PRIOR APPLICATION WUMBER: US 60/122,487 |
| PRIOR PILING DATE: 1999-02-26 |
| NUMBER OF SEQ ID NOS: 36681 |
| SOFTWARE: Patent.pm |
| SEQ ID NO 1413 |
| LENGTH: 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIGITGATGAGCTCCTTGAGTTCGGATTTCTTCAGCTTGTGCTTGTCTCC 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCC 479
                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                              5.3%; Score 63.6; DB 4; Length 962; 54.8%; Pred. No. 1.1e-06; Live 0; Mismatches 104; Indels (
                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature
CTHER INFORMATION: Incyte ID No. 6727066 2706645CB1
US-09-919-039-183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:

NAME/KEY: UNSURE

LOCATION: 56

OTHER INFORMATION: Xaa=Lys or Asn
US-09-513-999C-1413
                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 54.8
Matches 126; Conservative
                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
NAME/KEY: misc_feature
LOCATION: 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: w=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Homo sapiens
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 56..277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       430
                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            377
                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
```

```
Sequence 2162/c

| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| Sequence 2162/c
| TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
| TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
| TILLE REFERENCE: CL001307 |
| CURRENT APPLICATION NUMBER: 60/241,755 |
| PRIOR FILING DATE: 2000-10-03 |
| PRIOR FILING DATE: 2000-10-03 |
| PRIOR FILING DATE: 2000-10-09-08 |
| PRIOR FILING DATE: 2000-09-08 |
| NUMBER OF SEQ ID NOS: 207012 |
| SEQ ID NO 2162 |
| LENGTH: 2592
                                                                                                                               333 GAAGCCCACTTIGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAG 392
                                                                                                                                                                    393 AGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTC 452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                597
                                                                                                                                                                                                                                                                                                                208 crigicititiccacricigcagaagccrigaacriccricricarcagaacric 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            598 GAGCTGGACGCGGGGGGGGGGGGGGGGGGGGGGGGTGTGCGCTTTCCTTAGTACGTGC 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        658 GGCGGGTGGGTAGAGGGAGGCGCGCGCGAGCGGGAGGAGCCTGGCCGGCGCGCTCGGCAGG 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       326 GCGCCGCGCGGCGGCGGCGCTTCCCCGCCTCCCTCGCTCGGTGCGCCCCGCGCCCCGGGC 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   266 recercecerecrecrearerescreecreecreecreecreecreecececeaaceceee 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                538 ATTITGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          718 GCGCTCCCCCAGCCCTGTCTCCTCCCCCTTTCCTGCCCCCGACTCCCCCGACCCCGGGC
                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
4.5%; Score 54.4; DB 4; Length 2592;
Best Local Similarity 51.0%; Pred. No. 0.00047;
Matches 153; Conservative 0; Mismatches 146; Indels 1
Score 62.2; DB 4; Length 279; Pred. No. 1.5e-06; 1; Mismatches 44; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 22
US-09-949-016-13904/C
; Sequence 13904, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
Query Match 5.2%;
Best Local Similarity 66.2%;
Matches 88; Conservative
                                                                                                                                                                                                                                                                                                                                                                                       453 CTCCTTTGTTAAG 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCCTTGGTCAGG 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Human
US-09-949-016-2162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
```

```
418
                                                                                                                                                                                                                                                                                                                                                           478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           172
                                                                                           ò
                                                                                                                                                        ઠે
                                                                                                                                                                                       Вb
                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: CL001307;
CURRENT PELICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR PPLICATION NUMBER: 60/241,755

PRIOR PPLICATION NUMBER: 60/241,755

PRIOR PPLICATION NUMBER: 60/237,768

PRIOR PPLICATION NUMBER: 60/231,498

PRIOR PPLING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 13904

LENGTH: 43590
                                                                                                                                                                                                                                                                                                                                                                                                                                           2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2326 dedecedesedesedesedentededesedatesedesedentesedesedesedesedesedentesedesedentesedentesedentesedentesedente
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         778 GCGC-GGCCCACGCCCTGCCCTCCCTCCCGGACCCGCCTCGCAGGCCTCGCCCCC 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2506 ATGTAGAGGGTGTCGCCCGAGGCCATGGCTGAGGGCTCCGCCGCCACGGCCGCGGCG
                                                                                                                                                                                                                                                                                                                                                                                                           GCGCTCCCCCAGCCCTGTCTCCTCCTCTTCCTGCCCCCGACTCCCCCGAACCCCGGGC
                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                          1;
                                                                                                                                                                                                                                                                                                                                        Query Match
4.5%; Score 54.4; DB 4; Length 43690;
Best Local Similarity 51.0%; Pred. No. 0.0018;
Matches 153; Conservative 0; Mismatches 146; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Henderson, Robert A.
APPLICANT: Henderson, Robert A.
APPLICANT: MCMeill, Patricia D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
FILE REFERENCE: 210121.455C11
CURRENT APPLICATION NUMBER: US/09/643,597
CURRENT FILING DATE: 2000-08-21
NUMBER OF SEQ 1D NOS: 369
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Sequence 308, Application US/09643597
; Patent No. 6426072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kalos, Michael D.
Bangur, Chaitanya S
Hosken, Nancy
Fanger, Gary R.
Li, Samuel X.
Wang, Aljun
Skeiky, Yasir A.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wang, Tongtong
Fan, Liqun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
CORGANISM: Homo sapien
US-09-643-597-308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-13904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .09-643-597-308/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 308
LENGTH: 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                           538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          658
                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 352 AGTÍTTICATÍTICITICOTGGGCTGCTTATICTGGGAAGCCTTCÁAAGAÁTÍCGTTACÁCATC 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGAGAGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        418 CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     232 CTGTCCAAGTTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTCCCCCAAGAAG 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              172 CTGGGCAGCTCCCGGGTCAGCAGCTCCTTTAGTTCTGACTTGTTGAGCTTGAACTTGTCA 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          232 crericciaseirecricarciaecrircregias de contrarcirer contrarece de 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          crecicciosecricios de contra c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    112 cccrcrrrsccccsagracristssaassrscaccarcacarccassscrrcrccasa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     292 Arescearecadacacacacacacacacacrerresaacacecererre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      352 AGTTTTCATTTCTTCCTGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            292 Arideceárecadeacadaaaaacacadaracrerrideaacrecacererrerecreerre
                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                       6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6
                  Length 421;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 421;
Score 54.2; DB 3; Length 4 Pred. No. 0.00023; 0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Hosken, Nancy A.
APPLICANT: Hosken, Nancy A.
APPLICANT: Fanger, Gary R.
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
TITLE OF INVENTION: LAND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C6
CURRENT APPLICATION NUMBER: US/09/480,884A
CURRENT FILING DATE: 2001-08-27
NUMBER OF SEQ ID NOS: 330
SOFTWARE: FastSEQ for Windows Version 3.0
FENCENTIAL OF THE CONTROL OF THE CONTROL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 54.2; DB 4;
Pred. No. 0.00023;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-480-884A-308/c
. Sequence 308, Application US/09480884A
; Patent No. 6482597
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 4.5%;
Best Local Similarity 51.1%;
Matches 159; Conservative
         Query Match
Best Local Similarity 51.1%;
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52 GGCACCCAT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Homo sapien
US-09-480-884A-308
```

```
US-09-630-940B-308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ------CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               172. CTGGGCAGCTCCCGGGTCAGCAGCTCCTTTAGTTCTGACTTGTAGCTTGAACTTGTCA 113
478 ------CCAGCGAATTGTGAAATGTAAACATCATGGTTTCCATGGGGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     352 AGTITICATITICITICCIGGCIGCITATOTGGGAAGCCITICAAAGAATICGITACACATC 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    292 Articical de la contra de la contra de la contra de la contra contra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTTGATTTTTCCAAAAA17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            232 CTGTCCAAGTTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTCCCCAAGAAG 173
                                                           112 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCCAGGGCCTTCTCCAGA 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      112 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCACAGGCCTTCTCCAGA 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 54.2; DB 4; Length 421;
Pred. No. 0.00023;
0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Ralos, Michael D.
APPLICANT: Ralos, Michael D.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Banger, Gary R.
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C8
CURRENT APPLICATION NUMBER: US/09/542,615A
CURRENT PILING DATE: 2000-04-14
NUMBER OF SEQ ID NOS: 350
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 308, Application US/09606421B
Patent No. 6531315
GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Fance, Mancy
APPLICANT: Fanger, Gary R.
                                                                                                                                                                                                                                                                                                                                                                              US-09-542-615A-308/c
; Sequence 308, Application US/09542615A
; Patent No. 6518256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 51.1
Matches 159; Conservative
                                                                                                                                                       529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  529 TGAGATGGCAT 539
                                                                                                                                                                                                                           52 GGCACGCCAT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCACGCCAT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 26
US-09-606-421B-308/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-542-615A-308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 308
LENGTH: 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                           QQ
8
                                                                                                                                                   ò
                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
```

```
352 AGTITICATITICITICCIGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATC 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  292 ATGGCGATGCAGGACAGGAAGACACTACTCTTGGAAGTCCACCTCGTTGTCCTGTTG 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGGCGCTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          232 cróriccia directica de crícia de de deserta de contrata de contrata de de contrata de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  418 CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cresisca de cresista de contra de co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               112 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCCAGGGCCTTCTCCAGA 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ٠<u>.</u>
APPLICANT: Li, Samuel X.
APPLICANT: Wang, Aljun
APPLICANT: Wang, Aljun
APPLICANT: Skeiky, Yasir A.W.
AITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
ITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C9
CURRENT APPLICATION NUMBER: US/09/606,421B
CURRENT FILING DATE: 2000-06-28
NUMBER OF SEQ ID NOS: 358
SCOTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 308
LENGTH: 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.5%; Score 54.2; DB 4; Length 421;
51.1%; Pred. No. 0.00023;
rative 0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER FILE REPERENT ASPLICATION NUMBER: US/09/630,940B CURRENT APPLICATION NUMBER: US/09/630,940B CURRENT FILING DATE: 2000-08-02 NUMBER OF SEQ ID NOS: 367 SOFTWARE: FASTSEQ for Windows Version 3.0 SEQ ID NO 308 LENGTH: 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 308, Application US/09630940B
Patent No. 6737514
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Wang, Tongtong
APPLICANT: Ran, Liqun
APPLICANT: Kalos, Michael D.
APPLICANT: Bangur, Chattanya S.
APPLICANT: Hosken, Nancy
APPLICANT: Fanger, Gary R.
APPLICANT: Li, Samuel X.
APPLICANT: Mang, Aijun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Skeiky, Yasir A.W.
Henderson, Robert A.
McNeill, Patricia D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 51.1
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52 GGCACGCCAT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
CORGANISM: Homo sapien
US-09-606-421B-308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JS-09-630-940B-308/c
```

```
280 AAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCC 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               340 ACTITGCCATCTCCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCTCT 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 256 Agcreaccarcacrerregrerecaerrrefrearcareceercaagacaccaegerec 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   400 TTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCTGAGGTCCTCTTT 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     196 ricricerrereaaggeageageracricreraricardaagerraggaacricrerering 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 316 AAGGAGTCATGGCAAGCCATAGCTAGGCCACCAATCAGATTAAGAAATTCTGAGAAATCT
                                                                                                                                                                                                                                                     Sequence 138.25.26.

Sequence 128.25.26.

Patent No. 6759508

GENERAL INFORMATION:

APPLICANT: Loddes, Michael J.

APPLICANT: Mohamath, Raodoh

APPLICANT: Mohamath, Raodoh

APPLICANT: Benson, Robert A.

APPLICANT: Benson, Darin R.

APPLICANT: Secrist, Heather

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR

TITLE OF INVENTION: COMPOSITIONS AND DIAGNOSIS OF LUNG CANCER

FILE REFERENCE: 210121.475C10

CURRENT FILING DATE: 2001-05-11

NUMBER OF SEQ ID NOS: 735

SOFTWARER FALSEQ for Windows Version 3.0

LENGTH: 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 4.5%; Score 54.2; DB 4; Length 527; Best Local Similarity 54.2%; Pred. No. 0.00025; Matches 110; Conservative 0; Mismatches 93; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 3, Application US/08190560

Patent No. 5798257

GENERAL INFORMATION:
APPLICANT: Zain, Sayeeda
APPLICANT: Lukanidin, Bugene
TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY
TITLE OF INVENTION: THE MTS-1 GENE
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS: 3
ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER
STREET: 400 Garden City Plaza
       460 GTTAAGTAGCCTTTATCCCCAGC 482
                                                                         136 GAGAGAGTGTAGTTATAACCATC 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   460 GTTAAGTAGCCTTTATCCCCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         136 GAGÁGAGTGTAGTTÁTAACCÁTC 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc feature
LOCATION: (456)
OTHER INFORMATION: n=A,T,C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 11530
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: SCULLY,
STREET: 400 Garden
CITY: Garden City
STATE: New York
COUNTRY: United Sta
ZIP: 11530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                 US-09-854-133-281/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-190-560-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-854-133-281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                   238 ATTICIGCCTACTICITICCCTICIGCTICATGIGIACTACAAATAGICATIGCATGCA
                                                                                                                                                                                                                                                                                                       ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          280 AAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCC 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             340 ACTITGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCT 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   256 AGCTGACCATCACTGTTGGTGCCAGTTTCTTCATCATGCGGTCAAGGACACCAGGGTCC 197
                                                                                                                                                                                                                         352 AGTITICALITICITIC GGC TICTIA TOTO GGAAG COLICAA GAATTICG TA CACAT 293
                                                                                                                                                                                                                                                                                                                                                                         Arideceárica a cada de a cada de contra de a contra de contra con
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             232 CTGTCCAAGTTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTTCCCCAAGAAG 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGGCAGCTCCCGGGTCAGCAGCTCTTTAGTTCTGACTTGTTGAGCTTGAACTTGTCA 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ------CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGGAGTCATGGCAAGCCATAGCTAGGCCACCAATCAGATTAAGAAATTCTGAGAAATCT 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITIGATITICCAAAAAICCAGGGAACTCCTTITCCATGAGTACTCTCAGGTCCTCCTTT 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ricrigerrerrereaaggeageracricrerareaaggerraggaerergrerre 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             112 cccrcrrrgcccgagracrigrggaaggrggacacacarccagggcrrcrccaga 53
                                                                                 Gaps
                                                                             6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 281, Application US/09370838

Patent No. 644425

GENERAL INFORMATION:
APPLICANT: Beed, Steven G.
APPLICANT: Lodes, Michael J.
APPLICANT: Bescriet, Heather
TITLE OF INVENTION: COMPOUNDS FOR THERAPY AND DIAGNOSIS OF
TITLE OF INVENTION: LUNG CANCER AND METHODS FOR THEIR USE
TITLE OF INVENTION: LUNG CANCER AND METHODS FOR THEIR USE
TITLE OF INVENTION: LUNG CANCER AND METHODS FOR THEIR USE
CURRENT APPLICATION NUMBER: US/09/370,838
CURRENT FILING DATE: 1999-08-09
EARLIER APPLICATION NUMBER: US 09/285,323
EARLIER PILING DATE: 1999-04-02
NUMBER OF SEQ ID NOS: 289
SOFTWARE: FRSESEQ FOR Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.5%; Score 54.2; DB 3; Length 527;
llarity 54.2%; Pred. No. 0.00025;
Conservative 0; Mismatches 93; Indels
       Length 421;
                                                                         0; Mismatches 143; Indels
   Score 54.2; DB 4;
Pred. No. 0.00023;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: (456)
OTHER INFORMATION: n=A,T,C or G
4.5%;
Query Match
Best Local Similarity 51.1;
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCCACCCAT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc feature
LOCATION: (456)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 110; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 28
US-09-370-838-281/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-370-838-281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 281
LENGTH: 527
                                                                                                                                                                                                                                                                                                   298
                                                                                                                                                                                                                                                                                                                                                                             292
                                                                                                                                                                                                                                                                                                                                                                                                                                                       358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   196
                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
```

0; Gaps

```
SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                        APPLICATION NOMBER: US/US/465,277

FILING DATE:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
ATTORNEY/GENT INFORMATION:
NAME: DIGIGIO, FRANK S.
REGISTRATION NUMBER: 31,346
REGISTRANCE/OCCET NUMBER: 78792Y
TELECOMMUNICATION INFORMATION:
TELEPHONE: (516) 742-4343
TELEFAX: (516) 742-4343
TELEFAX: 230 901 SANS UR
TELEFX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTER:STICS:
LENGTH: 579 base pairs
TYPE: NUCLEic acid
STREANDENNESS: Gouble
                                                                                                                         APPLICATION NUMBER: US/08/469,277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 51.1:
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              146 GGCACGCCAT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: 11 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-468-946-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           446 AGTTTTCATTTCTTCCTGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATC 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   358 TGCTCCAGGTCCTTCATTATTTTGTCCACAGGCGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       326 crerccia directica reacritere da a a de contra de co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----CCAGCGAATTIGTGAAATGTAAACATCAIGGTTICCAIGGCGTGTTCCAIT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               206 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCCAGGGCCTTCTCCAGA 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               386 ATGGCGATGCAGGACAGGAAGACACAGTACTCTTGGAAGTCCACCTCGTTGTCCCTGTTG 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       266 CTGGGCAGCTCCCGGGTCAGCAGCTCCTTTAGTTCTGACTTGTTGAGCTTGAACTTGTCA 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 54.2; DB 1; Length 579;
Pred. No. 0.00026;
0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/08469277

Patent No. 5801142

GENERAL INFORMATION:
APPLICANT: Zain, Sayeeda

APPLICANT: Lukanidin, Eugene

TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY

TITLE OF INVENTION: THE MTS-1 GENE
NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS:
ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER

STREET: 400 Garden City Plaza
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/190,560
                                                                                                                                                                                                                CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: DiGiglio, Frank S.
REGISTRATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 7879:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (516) 742-4343
TELEFAX: (516) 742-4366
TELEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 51.1%;
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 579 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   146 GGGCACGCCAT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TOPOLOGY: linear; MOLECULE TYPE: CDNA US-08-190-560-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Garden City
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11530
                                                                                                                                                                                         FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-469-277-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
```

```
386 Ardscearceacacacacacacacacrecreresas as a reference recresioneres 327
                                                                                                                                                                                                                                                                                                                                                                                                       446 AGTITICATITICITICCIGGCIGCITATICTGGAAGCCITICAAAGAATTCGTTACACATC 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       418 CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cresecaecrecesarcas de contra de reconstructos de contra de contra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -----CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGCCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    326 CTGTCCAAGTTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTTCCCCAAGAAG 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             206 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCCAGGGCCTTCTCCAGA 147
                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                             6
Score 54.2; DB 1; Length 579;
Pred. No. 0.00026;
0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gequence 3, Application US/08468946;
Patent No. 3, Application US/08468946;
Patent No. 5843686;
GENERAL INFORMATION:
APPLICANT: Zain, Sayeeda
APPLICANT: Lukanidin, Eugene
TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY
TITLE OF INVENTION: THE MTS-1 GENE
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSE: SCULLY, SCOTT, MURPHY & PRESSER
STREET: 400 Garden City Plaza
CITY: Garden City Plaza
CITY: Garden City
STATE: New York
COUNTRY: United States
```

```
Sequence 3, Application US/09298625
Patent No. 6638504
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 579 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          146 GGCACCCCAT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 34
US-09-298-625-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-468-942-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ------CCAGCGAATTIGIGAAAIGTAAACAICAIGGITTCCAIGGCGIGITCCAIT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       446 AGTTTTCATTTCTTCCTGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATC 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              386 Ariciccarcicaciacada cada cada cada contracida de contraciones de contraci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           créticea di recical cancilicada a de contra de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGGCAGCTCCCGGGTCAGCAGCTCCTTTAGTTCTGACTTGTTGAGCTTGAACTTGTCA 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       206 cccrcrrrgcccgagractrigrggaaggrggacaccarcaacaggccrrcrccaga 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ,
,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 54.2; DB 2; Length 579;
Pred. No. 0.00026;
0; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 3, Application US/08468942

Patent No. 5965360

GENERAL INFORMATION: DAGGORD

APPLICANT: Lukanidin, Eugene

TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY

TITLE OF INVENTION: THE MTS-1 GENE

NUMBER OF SEQUENCES: 9

CORRESPONDENCE ADDRESS: 3

ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER

STREET: 400 Garden City Plaza
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,946
FILING DATE: US/08/468,946
FILING DATE: US/08/468,946
FILING DATE: 31.346
ATYONEY/AGENT INFORMATION:
NAME: DIGIGILO: Frank S.
REGISTRATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 31,346
RELEPHAX: (516) 742-4343
TELEPHAX: (516) 742-4343
TELEPHAX: (516) 742-4364
TELEPHAX: (516) 742-4365
TELEPHAX: 519 901 SANS UR
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LEMGTH: 579 base pairs
TYPE: MOLDAIC acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 51.1%;
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      146 GGCACGCCAT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Garden City
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: linear MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-468-942-3/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
266 CTGGGCAGCTCCCGGGTCAGCTCCTTTAGTTCTGACTTGTTGAACTTGTCA 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      206 CCCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCACATCCAGGGCCTTCTCCAGA 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       446 AGTITICATITICITICCIGGCIGCITATCIGGAAGCCITICAAAGAATTCGTTACACATC 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        386 ATGGCGATGCAGGACAGGACACACACTACTCTTGGAAGTCCACCTCGTTGTCCTGTTG 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                326 CTGTCCAAGTTGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTCCCCCAAGAAG 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              418 CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         478 -----CCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: LUKANIGIN, Bugene
TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY THE MTS-1 GENE
FILE REFERENCE: 7879ZYALII-2
CURRENT APPLICATION NUMBER: US/09/298,625
CURRENT FILING DATE: 1999-04-23
FRIOR APPLICATION NUMBER: 08/468,942
PRIOR APPLICATION NUMBER: 08/468,942
PRIOR PLLING DATE: 1995-06-06
PRIOR FILING DATE: 1995-01-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
4.5%; Score 54.2; DB 2; Length 579;
Best Local Similarity 51.1%; Pred. No. 0.00026;
Matches 159; Conservative 0; Mismatches 143: Indela
COMPUTER TELSAGO

COMPUTER TELSAGO

MEDIUM TYPE: Floppy disk
COMPUTER: TEM PC compatible
COMPUTER: TEM PC COMPATION
SOFTWARE: PatentIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,942
FILING DATE: 06-JUN-1995
CLASSIFICATION NUMBER: US 08/190,560
FILING DATE: 31-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Didiglio, Frank S.
REGISTRATION NUMBER: 31,346
REGISTRATION NUMBER: 31,346
REGISTRATION NUMBER: 31,346
REGISTRATION NUMBER: 31,346
RELEFAN: (516) 742-4343
TELEFPAN: (516) 742-4366
TELEFAN: (516) 742-4366
TELEFAN: CARACTREISTICS:
SEQUENCE CHARACTREISTICS:
LEMMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTREISTICS:
```

```
1651 ceschaccaccadadesesadesaccacacacacanacacacanacanacacacada 1710
                                                                                                                                                                                                                                                                                                                1711 GGAGAGATCGAAGGGCTAGTGGGGCGTGGGGCCGCAGCCGAGGCCCGGGTGGAGGGTTCC 1770
                                                                                                                                                                                                                                                                                                                                                                                                                                                              247 JACTICTITCCCTICIGCTICATGTGTACAAAATAGTCATIGCATGCAATGGTGAGG 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   302 TTCTTCCTGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATCATGGCGATG 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  307 CCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTCCAGG 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGACAGGAAGACACAGTACTCTTGGAAGTCCACCTCGTTGTCCCTGTTGCTGTCCAAG 183
                                                                                                                                                                                                                                 721 CICCCCCAGCCCTGICTCTCCTCCCTCTTCCTGCCCCCGACTCCCCCGACCCCGGGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781 CGGCCCACGCCCTGCCCTCGCTCCCGGACCCGCCTCGCAGAGGCCTCGCC 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 4.4%; Score 53.2; DB 1; Length 303; Best Local Similarity 51.3%; Pred. No. 0.00036; Matches 155; Conservative 0; Mismatches 138; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: Zain, Sayeeda
APPLICANT: Lawanidin, Eugene
TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY
TITLE OF INVENTION: THE MTS-1 GENE
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: SCULLY, SCOTT, MURPHY & PRESSER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/190,560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E: SCULLY, SCOTT, MURPHY & PRESSER
400 Garden City Plaza
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 1, Application US/08190560
; Patent No. 5798257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: DiGiglio, Frank S.
REGISTRATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 7879:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (516) 742-4343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELERAX: (516) 742-4366
TELEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 303 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New York
United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 11530
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Garden City
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 36
US-08-190-560-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-190-560-1
                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          242
                                                                                                                       ద
                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 14837, Application US/09949016
; Sequence 14837, Application US/09949016
; Retent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;
; FILE REPERBENCE: CLOOD-10.30
; CURRENT APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR FILING DATE: 2000-10-03
; PRIOR FILING DATE: 2000-09-08
; NUMBER: OF SEQ ID NOS: 207012
; SOFTWARE: FEASESEQ for Windows Version 4.0
; SEQ ID NO 14837
; TURDER DATE: THE OF TH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 206 cccrcrrrgccccaagracrrgragaagargacaccarcarccagagacrrcrccaga 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               238 ATTICIGCCIACTICTITCCCTTCIGCTTCATGTGTACTACAAAATAGTCATTGCATGCA 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGGCGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              326 CTGTCCAAGTTCCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTCCCCAAGAAG 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cresicascricios de contra contra contra contra contra de contra de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----CGAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              446 AGTITICATITICITICOTGGGTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATC 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      386 Arideciariccagacadadadacacagiracrcritegaagrocaccricerreric 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.5%; Score 54; DB 4; Length 86380; 52.2%; Pred. No. 0.0031; ive 0; Mismatches 110; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.5%; Score 54.2; DB 4; Length 579;
51.1%; Pred. No. 0.00026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches 143; Indels
PRIOR APPLICATION NUMBER: 07/981,455
PRIOR FILING DATE: 1992-11-25
PRIOR APPLICATION NUMBER: 07/550,600
PRIOR FILING DATE: 1990-07-09
NUMBER OF SEQ ID NOS: 17
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(86380)
OTHER INFORMATION: n = A,T,C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          51.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 52.2
Matches 120; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             146 GGCACCCAT 136
                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-949-016-14837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-949-016-14837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Sim:
Matches 159;
                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-298-625-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
```

```
302 irciricciessciratrarcressaasccircaaasarricsriacacarcarssas 243
242 CAGGACAGGAAGACACAGTACTCTTGGAAGTCCACCTCGTTGTCCTTGTTGCTGTCCAAG 183
                                                                                                                    367 TCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAAC 426
                                                                                                                                                                                                                             182 TIGCTCATCAGCTTCTGGAAAGCAGCTTCATCTGTCCTTTTCCCCAAGAAGCTGGGCAGC 123
                                                                                                                                                                                                                                                                                                                                                 427 TCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC---- 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         483 ----GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGC 537
                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 receggicalecteritradereresaciteras estas est
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 CCCGAGTACTTGTGGAAGGTGGACACCATCACATCCAGGGCCTTCTCCAGAGGCACGCC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    247 INCTITITICCTITITICATION OF TACTACA AND AND THE CANGE A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 303;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,946
FILING DATE: 06-UM-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/190,560
FILING DATE: 13-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Disignlo, Frank S.
REGISTRATION NUMBER: 31.346
REFERENCE/DOCKET NUMBER: 78792Y
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.4%; Score 53.2; DB 2; llarity 51.3%; Pred. No. 0.00036; Conservative 0; Mismatches 138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: (516) 742-4343
TELEFAX: (516) 742-4366
TELER: 230 910 SANS UR
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : 303 base pairs
nucleic acid
EDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 155; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                538 AT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 AT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-468-946-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-468-946-1
                                                                                                              ò
                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      247 TACTTCTTTCCCTTCTGCTTCATGTGTACTACAAATAGTCATTGCATGGTGAGG 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302 rrcrrccrggcrgcrrarcrggaagccrrcaaggaarrcgrracacarcarggcgarg 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       307 CCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGG 366
                                                                                                        367 TCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAAC 426
                                                                                                                                                                                                                       427 TCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC---- 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                    483 ----GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGC 537
                                                                                                                                                                                                                                                                                                                                     122 réceggréfacaderecritraderecretagaeringaaeringréaceretre 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 CCCGAGTACTTGTGGAAGGTGGACACCATCACATCCAGGGCCTTCTCCAGAGGGCACGCC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٠,
د
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.4%; Score 53.2; DB 1; Length 303;
11.3%; Pred. No. 0.00036;
ve 0; Mismatches 138; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOSUBLESSER

JOSUB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/469,277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Didiglio, Frank S.
REGISTRATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 7879ZY
TELECOMMUNICATION INFORMATION:
TELERAK: (516) 742-4343
TELERAK: (516) 742-4366
TELEX: 230 901 SANS UR
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 303 base pairs
TYPE: INCLES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/190,560
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             51.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New York
: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 51.3
Matches 155; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 400 C.TTY: Garden City
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 538 AT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 11530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 37
US-08-469-277-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-469-277-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                  g
                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

63

```
242 caggacaggagagagagagagaracreriggaagrecaccreriggrecargrecaag 183
                                                                                                                                                                                                            367 TCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAAC 426
                                                                                                                                                                                                                                                                         182 fracricarcaecricisca a de contra de contra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             307 CCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGG 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           242 CAGGACAGGAAGACACAGTACTCTTGGAAGTCCACCTCGTTGTCCCTGTTGCTGTTGCTAAG 183
       302 TTCTTCCTGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATCATGGCGATG 243
                                                                                                                                                                                                                                                                                                                                             427 TCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC---- 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      483 -----GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGC 537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTTCATTATTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCAGGGAAC 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCAGC---- 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGC 537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              receggreadeaderecritaderereadrigationedactricadeacerere 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCGAGTACTTGTGGAAAGGTGGACACCATCACATCCAGGGCCTTCTCCCAGAGGCCC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62 ccccadractricrosaadgresacaccarcaarcagesccrrcrocagagesaccc 3
                                                                                                                                                                                                                                                                                                                                                                                                                  rccccccrcaccaccrccrrraccrcracrrcacrrcaccrrcaacrrcrcacccrcrrrc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        247 TACTICITICCCTICTGCTICATGTGTACTACAAAATAGTCATTGCAATGGTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rrcricciggecrecrinarcroggaagecrircaaagaarrccrinacacarcargecarg
                                                                       CCCGCAATTAGGGAAAGAAGTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ingericaleaerinensaadeagenearerienentrineeeraaaadeenegeage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/09298625
Patent No. 6638504
GENERAL INFORMATION:
APPLICANT: Lukanidin, Eugene
TITLE OF INVENTION: DIAGNOSIS OF METASTATIC CANCER BY THE MTS-1 GENE
FILE REPERENCE: 787927A111.-Z
CURRENT APPLICATION NUMBER: US/09/298,625
CURRENT FILING DATE: 1999-04-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.4%; Score 53.2; DB 4; Length 303; 51.3%; Pred. No. 0.00036;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches 138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT FILING DATE: 1999-04-23
PRIOR APPLICATION NUMBER: 08/468,942
PRIOR PILING DATE: 1995-06-06
PRIOR APPLICATION NUMBER: 08/190,560
PRIOR PILING DATE: 1994-01-31
PRIOR PAPPLICATION NUMBER: 07/981,455
PRIOR FILING DATE: 1992-11-25
PRIOR FILING DATE: 1990-07-09
NUMBER OF SEQ ID NOS: 17
SOFTWARE: PATENTIN VOICE: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity 51.3
55; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              538 AT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JS-09-298-625-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Simi
Matches 155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 AT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-298-625-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         367
                                                                       307
                                                                                                                                                                                                                                                                                                                                                                                                                  122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122
                                                                                                                                                                                                                                                              g
                                                                    ò
                                                                                                                                    셤
                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                    TCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAAC 426
                                                                                                                                                                                                                                                                         TCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCCAGC---- 482
                                                                                                                                                                                                                                                                                                                                                                                                              483 ----GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGC 537
CCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGG 366
                                                                242 cagcacagaagacacacacrerricgaagrecececerrerecererecerereres
                                                                                                                                                                                                 182 Tracrichrchachrchagaaddaacrrcarchachcrrrhrccccaagaadcraggcagc 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 TCCCGGGTCAGCAGCTCCTTTAGCTCTGACTTGTTGAGCTTGAACTTGTCACCCTCTTTG 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62 ccccadractricricadadesiscacarcacarcadesicerrerecasasses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>ئ</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 4.4%; Score 53.2; DB 2; Length 303; Similarity 51.3%; Pred. No. 0.00036; 55; Conservative 0; Mismatches 138; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Zain, Sayeeda
APPLICANT: Zain, Sayeeda
APPLICANT: Lukanidin, Eugene
TITLE OF INVENTION: THE MTS-1 GENE
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: ACULIK, SCOTT, MURPHY & PRESSER
STREET: 400 Garden City Plaza
CITY: Garden City
STATE: New York
COUNTRY: United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: FIDDY GIBS

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US 08/468,942

FILING DATE: 06-UN-1995

CLASSIPICATION: 435

PRIOR APPLICATION: 435

PRIOR APPLICATION: WHER: US 08/190,560

FILING DATE: 31-JAN-1994

ATTORNEY/AGENT INFRAMATION:
NAME: 016/2010, Frank S.

REGISTRATION NUMBER: 31,346

REGISTRATION NUMBER: 31,346

RELEFANCE/DOCKET NUMBER: 31,346

TELEFHONE: (516) 742-4343

TELEFHONE: (516) 742-4366

TELEFAX: (516) 742-4366

TELEFX: C30 901 SANS UR

SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 39
1S-08-468-942-1/c
'Sequence 1, Application US/08468942
'Patent No. 5965360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 303 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 51.3
Matches 155; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: CDNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      538 AT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 11530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-468-942-1
                                                                                                                                                                                                                                                                         427
307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ~
                                                                                                                                    367
                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                          음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
G
                                                             a
                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                    ઠ
```

306 243

```
Sequence 1, Application US/08322742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: (617) 542-5070 TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: 200154
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                            Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TOPOLOGY: linear
US-08-322-742-1
                                                                                                                                                                  STREET: 225 Fr
CITY: Boston
STATE: Massach
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       280 AAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGGTCTGGAAGGCCC 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          340 ACTITGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCT 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          196 ACTITCTCCCCCACAAGCTGGGGGGGCTCCTTGTGCAGAGTTCCTTCATTTCCCCCTTA 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              316 AAGAAGTCATTGCACATGACAGTGATGAGTGCCAGGAAAACAGCATACTCCTGGAAGTCC 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  256 ACCTGCTGGTCGTCTCTCTCTCCAGGTTGCCCATCAGCTTCTTCAGCCCCTCCTCATCC 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            400 TTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTT 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.4%; Score 52.8; DB 1; Length 452;
54.0%; Pred. No. 0.00055;
tive 0; Mismatches 92; Indels
                                                                                                                                                                                                                                                                                                                                                                                              STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordberfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/662,198B
FILING DATE: 1991028
CLASSIFICATION S30
PRIOR APPLICATION MUMBER:
FILING DATE:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Sager, Ruth
APPLICANT: Lee, Sam W.
APPLICANT: Tomasetto, Catherine
TITLE OF INVENTION: CANCER DIAGNOSIS AND THERAPY
UNMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Fraser, Janis K.
REGISTRATION NUMBER: 34,819
REFERENCE/DOCKET NUMBER: 00530/049001
TELECOMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEPAS: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460 GTTAAGTAGCCTTTATCCCC 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    136 crcagcrraaacrraccc 117
                                                                                                                                            Sequence 1, Application US/07662198B
Patent No. 5262528
                                                                                                                                                                                                                                                                                                                                       E: Fish & Richardson
225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 108; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: NUCLEIC ACID
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                         ADDAL.
STREET: 22.
TMV: Boston
538 AT 539
                                       AT 1
                                                                                                                          US-07-662-198B-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
TOPOLOGY:
US-07-662-198B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
  ò
```

RESULT 42 US-08-322-742-1/c

```
TREET: 25 Franklin Street

TOWNSTRING CAMER DIAGNOSIS AND THERAPY
THIRD OF INVESTIGNE CAMER DIAGNOSIS AND THERAPY
THIRD OF INVESTIGNE CAMERS
TOWNSTRING CAMERS
THE CAM
```

```
238 ATTICIGCCTACTICITICCCTTCTGCTTCATGTGTACAAAATAGTCATTGCATGCA 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         364 AGTTTTCATTTCTTCCTGGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             304 Artescearecaegacaegaeaeaeaeaeraerrentaeaaerecaeereereereereeree 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      478 CCAGC------GAATTTGTGAAATGTAAACATCGTGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 298 AIGGIGAGGCCCGCAAITAGGGAAAAGAAGCICTGGAAAGCCCCACITIGCCAICICTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           358 TGGTCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             244 CIGICCAAGTIGCTCATCAGCTTCTGGAAAGCAGCTICATCTGTCCTTTTCCCCAAGAAG 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     418 CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       184 craciccaccricicacarcacacacacricriraciricraciricricaccricaacricica 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    364 AGTITICATITICITICCIGGGCIGCITATCTGGGAAGCCITCAAAGAATICGITACACATC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      304 Arddecarrecaedacaedacaedaeaererradaadrececererrecererre 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGGCGCTCTTTTTGATTTTCCAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      244 creficcia de recicarcia de contra de contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9;
                                                                                                                                                                                                                                                                                                               6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Bangur, Chaltanya S.
APPLICANT: Bangur, Chaltanya S.
APPLICANT: Bangur, Chaltanya S.
APPLICANT: Fanger, Gary
APPLICANT: Vedevick, Toom
APPLICANT: Vedvick, Toom
APPLICANT: Retter, Marc
APPLICANT: Retter, Marc
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
TITLE OF INVENTION: COMPOSITIONS OF LUNG CANCER
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
TITLE OF INVENTION: 120121.478C9
CURRENT APPLICATION NUMBER: US/09/614,124B
CURRENT FILING DATE: 2001-07-11
NUMBER OF SEQ ID NOS: 1668
SOFTWARE FEASTSO FOR WINDOWS Version 3.0
SEQ ID NO 1585
LENGTH: 392
                                                                                                                                                                                 Query Match
4.4%; Score 52.6; DB 4; Length 392;
Best Local Similarity 50.8%; Pred. No. 0.00058;
Matches 158; Conservative 0; Mismatches 144; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 4.4%; Score 52.6; DB 4; Length 392; Best Local Similarity 50.8%; Pred. No. 0.00058; Matches 158; Conservative 0; Mismatches 144; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5.09-614-124B-1585/c
Sequence 1585, Application US/09614124B
Patent No. 6630574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 64 GGCACCCAT 54
            ; ORGANISM: Homo sapiens US-09-736-457-1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-614-124B-1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        364 AGTTTTCATTTCTTCCTCGGCTGCTTATCTGGGAAGCCTTCAAAGAATTCGTTACACATC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           304 Arcaccardeacacacacacacacacacretracaacaccaccretres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          358 TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     244 crerccia directica reaccircio de la construcció de la construc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCC 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            184 CTGGGCAGCTCCCGGGTCAGCAGCTCTTTAGTTCTGACTTGTTGAGCTTGAACTTGTCA 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCAGC-----GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      124 cccrcrrrecccgacracrreregaagercacaccarccaeceaecerrecaea 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Lodes, Michael A.
APPLICANT: Penger, Gary
APPLICANT: Penger, Gary
APPLICANT: Penger, Gary
APPLICANT: Carter, Darrick
APPLICANT: Carter, Marc
APPLICANT: Reter, Marc
APPLICANT: Mannion, Jane
APPLICANT: Wang, Ajiun
APPLICANT: Alian
APPLICANT: Wang, Ajiun
APPLICANT: Alian
APPLICANT: Wang, Ajiun
APPLICANT: Alian
APPLICANT: Alian
APPLICANT: Wang, Ajiun
APPLICANT: Alian
APPLICANT: Wang, Ajiun
APPLICANT: Wa
                               APPLICANT: Vedvick, Tom
APPLICANT: Carter, Darrick
APPLICANT: Retter, Marc
APPLICANT: Retter, Jane
APPLICANT: Pan, Liqun
APPLICANT: Pan, Liqun
APPLICANT: Pan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
NUMBER OF SEQ ID NOS: 1833
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1585
LENGTH: 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.4%; Score 52.6; DB 4; Length 392; 50.8%; Pred. No. 0.00058; ive 0; Mismatches 144; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1585, Application US/09736457
Patent No. 6509448
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wang, Tongtong
Bangur, Chaitennya S
Lodes, Michael A.
Fanger, Gary
Vedvick, Tom
Carter, Darrick
Mannion, Jane
Mannion, Jane
Fan, Ligun
Fanger, Gary
Vedvick, Tom
Carter, Darrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 50.8
Matches 158; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              529 TGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCACGCCAT 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-702-705-1585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .09-736-457-1585/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
```

g

셤 ઠે a 8 g

ઠે

g

ઠે

ઠે

...

418 CCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCC 477	CIGGGCAGCTCCCGGGTCAGCTCCTTTAGTTCTGACTTGTTGAGCTTGAACTTGTCA 125	478 CCAGCGAATTTGTGAAATGTAAACATCATGGGTTTCCATGGCGTGTTCCATT 528	CCTCTTTGCCCGAGTACTTGTGGAAGGTGGACACCATCACATCCAGGGCCTTCTCCCAGA 65	529 TGAGATGGCAT 539	64 GGGCACGCAT 54 .
418	184 C	478	124	529	64
ò	셤	ò	ପ୍ପ	ò	QQ

Search completed: August 17, 2005, 22:33:07 Job time: 247 secs

Н

```
August 17, 2005, 22:20:57; Search time 793 Seconds (without alignments) 9823.210 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 ggaactaaaaaaaaaacttta........ggggcttcccgcccaccgg 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Published Applications NA:*

1: /cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*
2: /cgn2_6/ptodata/2/pubpna/USO7_PUBCOMB.seq:*
3: /cgn2_6/ptodata/2/pubpna/USO6_PUBW_PUB.seq:*
4: /cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
5: /cgn2_6/ptodata/2/pubpna/USO7_NEW_PUB.seq:*
6: /cgn2_6/ptodata/2/pubpna/USO7_NEW_PUB.seq:*
7: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
8: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
9: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
13: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
17: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
18: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
19: /cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
10: /cgn2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    / cgn2_6/ptodata/2/pubpna/US10H_PUBCOWB.seq:*/cgn2_6/ptodata/2/pubpna/US101_PUBCOWB.seq:*/cgn2_6/ptodata/2/pubpna/US10_IN_PW PUB.seq:*/cgn2_6/ptodata/2/pubpna/US11A_PUBCOWB.seq:*/cgn2_6/ptodata/2/pubpna/US11A_PUBCOWB.seq:*/cgn2_6/ptodata/2/pubpna/US11A_PUBCOWB.seq:*/cgn2_6/ptodata/2/pubpna/US11A_PUB.seq:*/cgn2_6/ptodata/2/pubpna/US11A_PUB.seq:*/cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*/cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14632570
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7316285 seqs, 3248459403 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                               - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IDENTITY NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-735-577-16
1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                          OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database
                                                                                                                                                                                                                                                                                          Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMED

		Description.	Sequence 16. Appl	Sequence 17, Appl	Sequence 1, Appli	Sequence 586, App	Sequence 13, Appl	Sequence 2350, Ap	Sequence 847, App
		ID	US-10-735-577-16	US-10-735-577-17	US-10-044-090-1	US-09-925-301-586	US-09-997-003-13	US-09-880-107-2350	US-10-172-118-847
		DB	19	13	13	δ	10	σ	11
		Length	1199	1199	1124	1893	1893	649	649
æ	Query	Match	100.0	100.0	58.7	52.9	52.9	50.1	50.1
		Score	1199	1199	703.4	634	634	601	601
	1]t	<u>.</u>	¦	7	٣	4	2	9	7
	Resu	4	:	υ	υ	υ	υ	υ	υ
	*		* Query Score Match Length DB ID	& Query Score Match Length DB ID 1199 100.0 1199 19 US-10-735-577-16	Acore Match Length DB ID 1199 100.0 1199 19 US-10-735-577-16 1199 100.0 1199 19 US-10-735-577-17	Acore Match Length DB ID II99 100.0 1199 19 US-10-735-577-16 1199 100.0 1199 19 US-10-735-577-17 703.4 58.7 1124 13 US-10-044-090-1	Acore Match Length DB ID 1199 100.0 1199 19 US-10-735-577-16 1199 100.0 1199 19 US-10-735-577-17 703.4 58.7 113 US-10-044-090-1 634 52.9 1893 9 US-09-925-301-586	Score Match Length DB ID 1199 100.0 1199 19 US-10-735-577-16 1199 100.0 1199 19 US-10-735-577-17 703.4 58.7 1124 13 US-10-044-090-1 634 52.9 1893 19 US-09-997-003-13	Adery Autoh DB ID 1199 100.0 1199 19 US-10-735-577-16 1199 100.0 1199 19 US-10-735-577-17 703.4 58.7 1124 13 US-10-044-090-1 634 52.9 1893 19 US-09-997-003-13 601 50.1 649 9 US-09-997-2350

10 601 501 649 21 181-10-556-137-939 Sequence 6714, Apr 661 501 649 21 181-10-556-137-939 Sequence 6714, Apr 662 501 649 663 17 611-10-556-137-619-114 Sequence 6714, Apr 663 74 642 668 74 642 668 74 642 668 74 642 668 74 642 668 74 642 668 74 642 668 74 642 648 74 642 648 74		00000044446000000	649 663 663 608 608 671 571 538	21 21 17	US-10-956-157-979 US-10-956-157-6214 US-10-264-049-1114	Sequence	979, App 6214, Ap 1114, Ap	
601 50.1 649 21 US-10-956-157- 595.8 49.7 663 17 US-10-564-049- 577.4 48.2 608 17 US-10-564-049- 577.4 48.2 608 17 US-10-67-632- 537 44.8 571 13 US-10-039-526- 537 44.8 571 13 US-10-039-526- 537 44.8 571 13 US-10-039-526- 537 44.8 571 13 US-10-099-926- 537 44.8 571 16 US-10-961-527- 516 43.0 538 18 US-10-085-7834- 485.2 40.5 2016 10 US-09-924-058- 485.2 40.5 2016 10 US-09-924-058- 485.2 40.5 2016 10 US-09-924-058- 485.2 40.5 2016 10 US-09-92-098- 485.2 40.5 2016 10 US-09-99-00- 485.2 40.5 2016 10 US-09-99-09- 485.2 40.5 2016 10 US-09-99-99- 40.5 2016 10 US-09-99-99-09- 40.5 2016 10 US-09-99-99- 40.5 2016 10 US-09-99- 40.5 2016 10 US-09- 40.5 2016		000044444000000	649 663 608 608 571 571 571 538	21	US-10-956-157-6214	Sequence	6214, Ap 1114, Ap	
595.8 49.7 663 17 US-10-264-049- 577.4 48.2 608 13 US-10-027-632- 577.4 48.2 608 13 US-10-027-632- 537 44.8 571 13 US-10-023-528- 537 44.8 571 13 US-10-03-528- 537 44.8 571 14 US-10-03-528- 537 44.8 571 16 US-09-926-600- 537 44.8 571 16 US-10-961-527- 516 43.0 538 18 US-10-962-738- 485.2 40.5 2016 10 US-09-922-6008- 485.2 40.5 2016 10 US-09-922-6008- 485.2 40.5 2016 10 US-09-922-0518- 485.2 40.5 2016 10 US-09-999-570- 441.4 38.5 47.2 18 US-10-085-783A- 446.4 37.4 448 18 US-10-085-783A- 446.4 37.2 448 18 US-10-242-535B- 441.1 0 US-09-918-995- 411 34.3 35.3 444 11 0 US-09-918-995- 413 33.3 39.2 15 US-10-085-783A- 396.2 33.0 632 15 US-10-085-783A- 396.2 33.0 632 15 US-10-085-783A- 377.4 31.5 392 18 US-10-085-783A- 377.4 31.5 392 18 US-10-085-783A- ALIGNMENTS ALIGNMENT	1	000444440000000	663 608 608 608 571 571 571 538	11	115_10_264_049_1114	00000000	1114, Ap	
577.4 48.2 608 13 US-10-027-632-537.4 48.2 608 17 US-10-027-632-537 44.8 571 13 US-0-99-926-537 44.8 571 13 US-0-99-926-537 44.8 571 12 US-10-099-926-537 44.8 571 12 US-10-099-926-926-926-926-926-926-926-926-926-9		8844446600000	608 608 571 571 571 538		PTT1 - 740 - 407 - 01 - 60	ממכבתוונט		
577.4 48.2 608 17 US-10-027-632-537 44.8 571 13 US-10-099-206-537 44.8 571 13 US-10-099-206-537 44.8 571 13 US-10-099-206-537 44.8 571 13 US-10-099-926-537 44.8 571 14 US-10-099-926-536 43.0 538 17 US-10-099-926-5098-52 40.5 2016 10 US-09-992-6008-685-2 40.5 2016 10 US-09-992-6008-685-2 40.5 2016 10 US-09-992-6098-685-2 40.5 2016 10 US-09-992-6098-685-2 40.5 2016 10 US-09-992-0998-685-2 40.5 2016 11 US-09-992-0998-695-40-5 2016 14 US-10-000-986-783-40-5 2016 14 US-10-000-986-783-40-5 2016 14 US-10-085-783-44-4 38.5 40.5 2016 14 US-10-085-783-44-4 38.5 47.2 17 US-10-242-535-44-4 48 17 US-10-242-535-44-4 48 17 US-10-085-783-44-4 36.2 448 17 US-10-085-783-44-4 36.2 448 17 US-10-085-783-44-4 36.2 448 18 US-10-085-783-44-4 36.2 35.9 444 11 US-10-242-535-44-4 36.2 33.0 632 15 US-10-085-783-4-4-4 31.5 392 18 US-10-085-783-7 US-10-085		844446600000	608 571 571 571 538 538		US-10-027-632-261591	Sequence	261591,	
537 44.8 571 9 US-09-920-300A-5537 44.8 571 13 US-10-033-528-537 44.8 571 13 US-10-033-528-537 44.8 571 15 US-10-099-926-535 516 43.0 538 18 US-10-099-926-535 516 43.0 538 18 US-10-099-926-600A-685-2 40.5 2016 10 US-09-926-600A-685-2 40.5 2016 10 US-09-926-600A-685-2 40.5 2016 10 US-09-926-600A-685-2 40.5 2016 10 US-09-995-570-485-2 40.5 2016 10 US-09-995-570-485-2 40.5 2016 10 US-09-995-570-485-2 40.5 2016 10 US-09-999-570-485-2 40.5 2016 10 US-09-999-570-40-488-2 40.5 2016 10 US-09-999-570-40-488-2 448-48-48-48-48-48-48-48-48-48-48-48-48-	1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	44440000000	571 571 571 571 538 538		US-10-027-632-261591	Sequence	ŧ٨	
537 44.8 571 13 US-10-093-526-537 44.8 571 16 US-10-099-926-557 44.8 571 22 US-10-099-926-6096-6098-52 40.5 2016 10 US-09-92-609E 485.2 40.5 2016 10 US-09-92-609E 485.2 40.5 2016 10 US-09-93-509-509-509-509-509-509-509-509-509-509	1111122222222222 201122222222222 201224444444 201224444444444	444 4 4 4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6	571 571 571 538 538		JS-09-920-300A-890	Sequence	390, App	
537 44.8 571 16 US-10-099-926-515 44.8 571 22 US-10-246-537 516 43.0 538 17 US-10-246-5358 485.2 40.5 5016 10 US-09-992-6004 485.2 40.5 2016 10 US-09-992-6004 485.2 40.5 2016 10 US-09-992-6004 485.2 40.5 2016 10 US-09-992-0958-6004 485.2 40.5 2016 10 US-09-992-0986-485.2 40.5 2016 10 US-09-992-0986-485.2 40.5 2016 10 US-09-992-0986-485.2 40.5 2016 10 US-09-992-00986-485.2 40.5 2016 10 US-09-992-0085-7834-446.4 37.2 474 18 US-10-085-7834-446.4 37.2 474 18 US-10-085-7834-446.4 37.2 474 18 US-10-085-7834-446.4 37.2 444 11 US-10-242-5354-446.4 37.2 444 11 US-10-242-5354-446.4 37.2 444 11 US-10-085-7834-446.4 37.2 444 11 US-10-085-7834-446.4 37.2 444 11 US-10-242-5354-446.4 37.2 33.3 441 10 US-09-918-995-429-43-3 33.3 441 10 US-09-918-995-429-43-3 33.3 441 10 US-09-918-995-429-43-40-446-4 37.2 US-10-085-7834-446.4 37.2 444 11 US-10-085-7834-446.4 37.2 33.3 392 17 US-10-085-7834-446.4 37.4 31.5 392 17 US-10-342-5558-7834-446.4 37.2 33.0 6000000000000000000000000000000000	1 1 1 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	44 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	571 571 538 538		US-10-033-528-890	a)	890	
537 44.8 571 22 US-10-961-527-515 516 43.0 538 17 US-10-242-535 516 43.0 538 17 US-10-242-535 516 43.0 538 18 US-10-085-7834 485.2 40.5 2016 10 US-09-922-0058 485.2 40.5 2016 10 US-09-922-0595 610 US-09-923-0595 610 US-09-918-995-0595 610 US-09-918-995-059	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4 4 4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	571 538 538		US-10-099-926-890	Sequence	890	
516 43.0 538 17 US-10-242-555R 485.2 40.5 2016 10 US-09-992-6004 485.2 40.5 2016 10 US-09-992-6004 485.2 40.5 2016 10 US-09-992-6095 485.2 40.5 2016 10 US-09-992-6095 485.2 40.5 2016 10 US-09-995-6095 485.2 40.5 2016 11 US-09-995-70-986-7087 485.2 40.5 2016 14 US-10-006-489-708-708-708-708-708-708-708-708-708-708	1 0 1 0 2 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2	mm000000	538		US-10-961-527-890	Sequence	890	
485.2 40.5 2016 10 US-09-992-6008 485.2 40.5 2016 10 US-09-992-095E 485.2 40.5 2016 10 US-09-992-095E 485.2 40.5 2016 14 US-10-000-489-570-6008 485.2 40.5 2016 14 US-10-000-986-685-2 40.5 2016 16 US-10-15-16-78-67-67-67-67-67-67-67-67-67-67-67-67-67-		m 0 0 0 0 0 0	538		US-10-242-535A-47618	Sequence	47618	
485.2 40.5 2016 10 US-09-992-600R 485.2 40.5 2016 10 US-09-992-000R 485.2 40.5 2016 10 US-09-922-0958 485.2 40.5 2016 10 US-09-992-0958 485.2 40.5 2016 10 US-09-992-0958 485.2 40.5 2016 11 US-09-992-0958 485.2 40.5 2016 14 US-10-000-986-485.2 40.5 2016 16 US-10-000-986-485.2 40.5 2016 14 US-10-000-986-495.2 40.5 2016 16 US-10-085-783A-471.6 39.3 482 17 US-10-085-783A-471.6 39.3 482 17 US-10-085-783A-446-4 37.4 480 18 US-10-085-783A-446-4 37.2 472 17 US-10-242-555A-446-4 37.2 474 17 US-10-242-555A-446-4 37.2 474 17 US-10-085-783A-446-4 37.2 474 17 US-10-085-783A-434-4 36.2 35.2 448 18 US-10-085-783A-434-4 36.2 35.2 448 18 US-10-085-783A-434-4 36.2 35.2 441 10 US-09-991-095-783A-434-4 36.2 35.2 441 10 US-09-991-095-783A-434-4 36.2 35.2 441 10 US-09-918-995-783A-434-4 36.2 35.2 15 US-10-085-783A-377-4 31.5 392 18 US-10-342-535B-377-4 31.5 392 18 US-	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2				US-10-085-783A-47618		47618, A	
485.2 40.5 2016 10 UG-09-924-340-485.2 40.5 2016 10 UG-09-992-095E 485.2 40.5 2016 10 UG-09-992-095E 485.2 40.5 2016 10 UG-09-992-095E 485.2 40.5 2016 14 UG-10-00-480-485.2 40.5 2016 14 UG-10-00-986-485.2 40.5 2016 14 UG-10-00-986-485.2 40.5 2016 16 UG-10-00-386-485.2 40.5 2016 16 UG-10-38-854-471.6 39.3 482 17 UG-10-242-535A-448 37.4 480 17 UG-10-242-535A-448 37.4 480 17 UG-10-242-535A-446-4 37.2 18 UG-10-085-783A-446-4 37.2 444 17 UG-10-242-535A-446-4 37.2 448 18 UG-10-085-783A-446-4 37.2 444 11 UG-10-242-535A-446-4 37.2 444 11 UG-10-242-535A-446-4 37.2 444 11 UG-10-242-535A-446-4 37.2 474 17 UG-10-242-535A-446-4 37.2 474 17 UG-10-242-535A-446-4 37.2 444 11 UG-10-242-535A-446-4 37.2 444 11 UG-10-242-535A-446-4 37.2 444 11 UG-10-242-535A-446-4 37.2 444 11 UG-10-242-535A-446-4 37.2 46-4 10 UG-09-918-995-423-4 36.2 33.0 632 15 UG-10-085-783A-446-4 31.5 392 17 UG-10-242-535A-377-4 31.5 392 18 UG-10-085-783A-377-4 300-085-783A-377-4 300-085-783A-377-4 300-085-783A-377-4 300-085-	2272777777777777777777777777777777777		2016		US-09-992-600A-1		1, Appli	
485.2 40.5 2016 10 US-09-992-095 485.2 40.5 2016 10 US-09-999-570-485.2 40.5 2016 14 US-00-999-570-485.2 40.5 2016 14 US-00-099-570-485.2 40.5 2016 14 US-10-000-489-570-485.2 40.5 2016 16 US-10-001-142-678-471.6 39.3 40.2 10 US-10-085-783-471.6 39.3 482 17 US-10-242-535-471.6 39.3 482 17 US-10-242-535-471.4 38.5 472 18 US-10-085-783-476.4 37.4 480 17 US-10-242-535-476.4 37.2 474 18 US-10-085-783-476.4 37.2 448 11 US-10-242-535-476.1 35.2 466 10 US-09-918-995-422 33.0 632 15 US-10-085-783-471 10 US-09-918-995-422 33.0 632 15 US-10-085-783-471 10 US-09-918-995-422 33.0 632 15 US-10-085-783-471 10 US-09-918-995-425-471 10 US-09-918-995-422 33.0 632 15 US-10-085-783-471 10 US-09-918-995-425-471 10 US-09-918-995-425-425-471 10 US-09-918-995-425-471 10 US-09-918-995-425-471 10 US-09-918-995-425-471 10 US-09-918-995-425-471 10 US-09-918-9	645000000000000000000000000000000000000		2016		US-09-924-340-1	Sequence		
485.2 40.5 2016 10 US-09-959-570-485.2 40.5 2016 14 US-10-000-486-485.2 40.5 2016 14 US-10-000-986-485.2 40.5 2016 14 US-10-000-986-485.2 40.5 2016 14 US-10-000-986-485.2 40.5 2016 16 US-10-001-142-485.2 40.5 2016 11 US-10-82-5554-471.6 39.3 482 17 US-10-242-5555-471.6 39.3 482 17 US-10-242-5555-471.6 39.3 482 18 US-10-085-7835-448 37.4 480 18 US-10-085-7835-446-4 37.2 47 US-10-242-5555-437-46-4 37.2 47 US-10-242-5555-437-46-4 37.2 448 17 US-10-242-5555-437-46-4 37.2 448 17 US-10-242-5555-437-4 36.2 448 17 US-10-242-5555-437-4 36.2 35.2 448 17 US-10-242-5555-437-4 31.5 392 17 US-10-242-5555-357-4 31.5 392 18 US-10-085-7835-377-4 31.5 392 18 US-10-30-30-30-30-30-30-30-30-30-30-30-30-30	4 2 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		2016	2	US-09-992-095B-1	Seguence		
485.2 40.5 2016 14 US-10-000-489-485.2 40.5 2016 14 US-10-000-986-485.2 40.5 2016 16 US-10-0154-6-788-52 40.5 2016 16 US-10-0154-6-788-52 40.5 2016 16 US-10-018-142-485.2 40.5 2016 16 US-10-085-7834-41.6 39.3 482 17 US-10-085-7834-461.4 38.5 472 18 US-10-085-7834-461.4 37.4 480 17 US-10-085-7834-461.4 37.4 480 17 US-10-085-7834-461.4 37.2 441 17 US-10-085-7834-461.4 37.2 441 10 US-10-085-7834-461.4 37.2 441 10 US-10-085-7834-461.4 36.2 448 17 US-10-085-7834-461.4 36.2 448 18 US-10-085-7834-461.4 36.2 448 18 US-10-085-7834-461.4 36.2 33.2 46.10 US-09-918-995-413 36.2 33.3 632 15 US-10-085-7834-995-495-495-495-495-495-495-495-495-49	0.0000000000000000000000000000000000		2016	20	US-09-999-570-1	Seguence		
485.2 40.5 2016 14 US-10-000-986-485.2 40.5 2016 16 US-10-16-4678-485.2 40.5 2016 16 US-10-16-4678-485.2 40.5 2016 16 US-10-16-88-854-471.6 39.3 482 17 US-10-242-5554-471.6 39.3 482 17 US-10-242-5554-471.8 37.4 480 17 US-10-242-5557-471.8 37.4 480 17 US-10-242-5557-471.8 37.4 480 17 US-10-242-5557-471.8 37.4 37.2 474 18 US-10-085-7837-471.8 35.2 448 18 US-10-085-7837-471.8 35.2 448 18 US-10-085-7837-471.9 35.2 466 10 US-09-91-095-7837-471.9 35.2 466 10 US-09-91-005-7837-471.9 35.2 466 10 US-09-91-005-7837-471.9 35.2 466 10 US-09-91-005-7837-471.9 37.4 31.5 392 17 US-10-085-7837-471.9 US-09-91-005-7837-471.9 US-09-91-005-78	6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		2016	14	US-10-000-489-1	Sequence		
485.2 40.5 2016 16 US-10-154-678-485.2 40.5 2016 16 US-10-01142-485.2 40.5 2016 16 US-10-01142-485.2 40.5 2016 21 US-10-083-854-471.6 39.3 482 18 US-10-085-7834-461.4 38.5 472 17 US-10-242-5354-448 37.4 480 18 US-10-085-7834-446.4 37.2 472 17 US-10-242-5354-446.4 37.2 474 17 US-10-242-5354-446.4 37.2 474 17 US-10-242-5354-446.4 37.2 474 17 US-10-085-7834-446.4 37.2 474 17 US-10-085-7834-446.4 37.2 448 17 US-10-085-7834-446.4 37.2 448 17 US-10-085-7834-446.1 37.2 448 17 US-10-085-7834-446.1 37.2 448 18 US-10-085-7834-446.1 34.3 441 10 US-09-918-995-413 35.8 477 10 US-09-918-995-413 35.8 477 10 US-09-918-995-412 35.2 35.2 15 US-10-085-7834-10-085-7			2016	14	US-10-000-986-1	Sequence		
485.2 40.5 2016 16 US-10-001-142-485.2 40.5 2016 21 US-10-001-142-485.2 40.5 2016 21 US-10-085-7854-471.6 39.3 482 17 US-10-242-5354-461.4 38.5 472 17 US-10-242-5354-461.4 38.5 472 17 US-10-242-5354-448 37.4 480 18 US-10-085-7834-446.4 37.2 471 10 US-10-242-5354-446.4 37.2 474 17 US-10-242-5354-446.4 37.2 474 17 US-10-242-5354-434.4 36.2 474 17 US-10-242-5354-434.4 36.2 448 18 US-10-085-7834-434.4 36.2 448 18 US-10-085-7834-434.4 36.2 35.2 466 10 US-09-918-995-434.4 36.2 35.2 466 10 US-09-918-995-431.3 37.4 31.5 392 17 US-10-085-7834-10 US-09-918-995-377.4 31.5 392 18 US-10-085-7834-10 US-09-918-995-377-10 US-09-918-995-377-4 31.5 392 18 US-10-085-7834-10 US-07-08-918-918-918-918-918-918-918-918-918-91	2000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ċ	2016	16	US-10-154-678-1	Seguence	Ä	
485.2 40.5 2016 21 US-10-838-BS4-471.6 39.3 482 17 US-10-8242-5358 471.6 39.3 482 17 US-10-8242-5358 461.4 38.5 472 18 US-10-865-7838 461.4 37.4 480 17 US-10-242-5358 446.4 37.4 480 17 US-10-85-7838 446.4 37.2 474 18 US-10-085-7838 446.4 37.2 474 18 US-10-085-7838 434.4 36.2 448 17 US-10-242-5558 434.4 36.2 448 18 US-10-085-7838 434.4 36.2 33.0 632 15 US-10-242-5558 377.4 31.5 392 17 US-09-918-995-877.4 31.5 392 17 US-09-918-995-877.4 31.5 392 18 US-10-085-7838 17.4 31.5 392 18 US-10-085-7838 US-10-085	X C C C C C C C C C C C C C C C C C C C		2016	16	US-10-001-142-1	Seguence	~ `	
471.6 39.3 482 17 US-10-242-5358 461.4 38.5 472 17 US-10-242-5358 461.4 38.5 472 17 US-10-085-703A 448 37.4 480 18 US-10-085-703A 446.4 37.2 474 17 US-10-242-535A 446.4 37.2 474 17 US-10-242-535A 446.4 37.2 474 17 US-10-242-535A 434.4 36.2 474 17 US-10-085-703A 434.4 36.2 448 17 US-10-085-703A 434.4 36.2 448 17 US-10-085-703A 434.4 36.2 448 17 US-10-242-535A 434.4 36.2 35.8 477 10 US-09-997-003- 411 34.3 441 10 US-09-997-003- 396.2 33.0 632 15 US-10-166-698 377.4 31.5 392 18 US-10-085-703A 377.4 31.5 392 18 US-10-085-703A 11	a u u u u u u u u u u u u u u u u u u u		2016		US-10-838-854-1	Sequence	,	
471.6 39.3 482 18 US-10-085-7834 461.4 38.5 472 17 US-10-242-5558 448 37.4 480 17 US-10-242-5558 446.4 37.2 472 17 US-10-242-55358 446.4 37.2 474 17 US-10-242-5358 434.4 36.2 448 18 US-10-085-7834 434.4 36.2 448 17 US-10-242-5358 434.4 36.2 448 19 US-10-085-7834 434.4 36.2 448 19 US-10-085-7838 434.4 36.2 448 19 US-10-085-7838 437.4 36.2 446 10 US-09-918-995-403 396.2 33.0 632 17 US-10-242-5358 377.4 31.5 392 17 US-10-242-5358 377.4 31.5 392 18 US-10-085-7838 11 OS-09-918-995-403 377.4 31.5 392 18 US-10-085-7838 11 CANT: Waisman, David M. LICANT: Waisman, David M. REFERENCE: ME03-09 RENT FILITON NUMBER: US/10/735,577 RAPPLICATION NUMBER: US/10/735,577 RAPPLICATION NUMBER: US/10/33,40			482		US-10-242-535A-46392	Sequence	4639	
461.4 38.5 47.2 17 US-10-242-5354 448 37.4 480 17 US-10-085-7834 448 37.4 480 17 US-10-085-7834 446.4 37.2 18 US-10-085-7834 446.4 37.2 474 17 US-10-242-55354 446.4 37.2 474 17 US-10-242-55354 434.4 36.2 448 18 US-10-085-7834 434.4 36.2 448 18 US-10-242-5358 434.4 36.2 448 18 US-10-242-5358 434.4 36.2 448 18 US-10-085-7834 422 35.2 466 10 US-09-918-995- 422 35.2 466 10 US-09-918-995- 422 35.2 466 10 US-09-918-995- 377.4 31.5 392 17 US-10-085-7834 377.4 31.5 392 17 US-10-085-7834 1.5 377.4 31.5 392 18 US-10-085-7834 1.5 S577-16 EACTION NOWBER: US/10/35577 EREFERENCE: ME03-009 ERENT APPLICATION NUMBER: US/10/735,577 ERENT FILICATION NUMBER: US/10/35,577 ERENT FILICATION NUMBER: US/10/35,577 ERENT FILICATION NUMBER: US/10/35,577	u cu		482		US-10-085-783A-46392	Sequence	4635	
10. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	1		7 . 7		US-IU-242-535A-5/93U	Sequence	7 7 7	
448 37.4 480 18 US-10-42-5358 446.4 37.2 474 17 US-10-242-5358 446.4 37.2 474 17 US-10-242-5358 434.4 36.2 474 17 US-10-242-5358 434.4 36.2 448 17 US-10-085-7838 434.4 36.2 448 17 US-10-085-7838 434.4 36.2 448 17 US-10-085-7838 422.4 35.8 477 10 US-09-918-995-412 35.3 466 10 US-09-918-995-396-2 33.0 632 15 US-10-6698-377-4 31.5 392 18 US-10-085-7838 377.4 31.5 392 18 US-10-085-7838 377.4 31.5 392 18 US-10-085-7838 1735-577-16 ILICANI: Waisman, David M. LICANI: Waisman, David M. LICANI: Waisman, David M. EREFERRICE: ME03-09 EREFERRICE: ME03-09 EREFERRICE: ME03-09 EREFERRICE: WAS03-09 EREFERRICE: USCA10-135,577 ERMY FILLICATION NUMBER: USCA33.40			7/4		US-IU-U85-/83A-5/93U	Sednence	,,,	
446.4 37.2 440 12 05-10-25-7837 446.4 37.2 474 17 10 10-10-25-7837 434.4 36.2 448 17 10-10-25-5358 434.4 36.2 448 18 10S-10-242-5358 434.4 36.2 448 18 10S-10-085-7838 429.4 35.8 477 10 10S-09-918-995-421 34.3 441 10 10S-09-918-995-396.2 33.0 632 15 10S-10-106-698-377.4 31.5 392 17 10S-10-242-5558 377.4 31.5 392 18 10S-10-085-7838 ence 16, Application US/10735577 ALIGNMENTS 1			9 6		US-IU-242-535A-49122	Sequence	44	
446.4 37.2 474 18 US-10-442-5354 434.4 36.2 448 17 US-10-085-7834 434.4 36.2 448 17 US-10-085-7834 423.4 35.8 477 10 US-10-242-5554 422 35.2 466 10 US-09-918-995- 421 34.3 441 10 US-09-918-995- 396.2 33.0 632 15 US-10-106-698 377.4 31.5 392 17 US-10-106-698 377.4 31.5 392 17 US-10-085-7834 11 34.3 40.2 17 US-10-106-698 377.4 31.5 392 18 US-10-085-7834 12 5.77-16 ALIGNMENTS ALIGNMENTS ELECTION US/10735577 LICANT: Waisman, David M. LICANT: Waisman, David M. ELECTION USMENT COMPOSITIONS and Methods EREFERENCE: ME03-009 RENT APPLICATION NUMBER: US/10/735,577 RENT FILING DATE: 2003-12-12 RENT FILING DATE: 2003-12-12 RENT FILING DATE: 2003-12-12	0.000 44444 0.000 12647 0.000 0.000		480		US-10-U85-783A-49122	Sequence	4 7777 A	
136.2 17.1 10.005-7037 434.4 36.2 448 17 00-102-55-7037 434.4 36.2 448 17 00-095-7037 429.4 35.8 466 10 08-0-918-995-413 35.8 466 10 08-0-9-918-995-413 34.3 441 10 08-0-9-97-003-396.2 33.0 632 15 08-10-106-698-377.4 31.5 392 18 08-10-085-7838-377.4 31.5 392 18 08-10-085-7838-377.4 31.5 392 18 08-10-085-7838-377.4 31.5 392 18 08-10-085-7838-377.4 31.5 392 18 08-10-085-7838-377.4 31.5 392 18 08-10-085-7838-377.4 31.5 392 18 08-10-085-7838-377.4 31.5 392 18 08-10-085-7838-377.4 31.5 392 18 08-10-085-7838-377.4 31.5 392 18 08-10-085-7838-378-388-388-388-388-388-388-388-38	33.4 4444 54321 5443 5444 6533 677		4 / 4		US-IU-242-535A-56U36	Sednence	36036, A	
135-77-16 1	0 0 0 4 4 4 4 4 4 4 4 4 4 6 6 6 6 6 6 6		* 0		10-10-060-763A-36036	Sednence	00000 A	
125-14 35.8 477 10 US-09-09-09-09-09-09-09-09-09-09-09-09-09-	144444 101128444 1012844 101384		0 7 7	1 .	US-10-242-333A-36304 IIS-10-086-7833-66604	Sequence	20204, A	
12. 35.2 466 10 US-09-918-995-411 34.3 441 10 US-09-918-995-396.2 33.0 632 15 US-09-918-995-377.4 31.5 392 18 US-10-085-783A 377.4 31.5 392 18 US-10-085-783A 377.4 31.5 392 18 US-10-085-783A 375-577-16 Eation No. US20040142897A1 ALIGNMENTS RAL INFORMATION: David M. LICANT: Waisman, David M. LCANT: Waisman, David M. EREFERENCE: ME03-009 EREFERENCE: ME03-009 EREFERENCE: ME03-009 ERET APPLICATION NUMBER: US/10/735,577 ERET APPLICATION NUMBER: US/10/735,577 ERET APPLICATION NUMBER: US/10/735,577 ERET APPLICATION NUMBER: US/10/735,577	442 443 444 37 37		477	9 6	α	outer bes	7 20202	
411 34.3 441 10 02-09-003-003-396.2 33.0 632 15 US-10-106-698-377.4 31.5 392 18 US-10-085-7835A-377.4 31.5 392 18 US-10-085-7835A-377.4 31.5 392 18 US-10-085-7835A-377.4 31.5 392 18 US-10-085-7835A-375-16 Ence 16, Application US/10735577 Eact INFORMATION: David M. LICANT: Waisman, David M. LICANT: Waisman, David M. EREFERENCE: ME03-009 RENT APPLICATION NUMBER: US/10/735,577 RENT FILLION DAVIG M. RENT FILLION DAVIG M. RENT APPLICATION NUMBER: US/10/735,577 RENT FILLION DAVIG M. SEATH APPLICATION NUMBER: US/10/735,577	42 43 44 37 45 37		466	2 -	TIS-109-918-995-12556	Segmente	12556, 1	
396.2 33.0 632 15 US-10-106-698 377.4 31.5 392 17 US-10-106-698 377.4 31.5 392 17 US-10-242-5558 377.4 31.5 392 18 US-10-085-703A ALIGNMENTS ALIGNMENTS RAL INFORMATION: CLICANT: Waisman, David M. E. REFERENCE: ME03-009 RENT APPLICATION NUMBER: US/10/35,577 RENT FILING DATE: 2003-12-12 RENT FILING DATE: 2003-12-12 RENT FILING DATE: 2003-12-12 RENT FILING DATE: 2003-12-12	43 44 37 45 37		441	2 6	TIS-09-997-003-26	o Cuertos	26 200	
377.4 31.5 392 17 US-10-242-535A 377.4 31.5 392 18 US-10-242-535A 373-577-16 Application US/10735577 ication No. US20040142897A1 RAL INFORMATION: David M. LE OF INVENTION: Compositions and Methods E REFERENCE: ME03-009 ERRY APPLICATION NUMBER: US/10/735,577 RENT FILING DATE: 2003-12-12	44 377.		'n	2 5	-10-106-698-24	Segmence	41.	
1 1735-577-16 1735-577-16 174 31:5 392 18 US-10-085-78378 1735-577-16 1735-577	45 377.		۰		-10-242-5358-4556	o Cuarman	1 1	
1 135-577-16 ence 16, Application US/10735577 ence 16, Application US/10735577 tation No. US20040142897A1 LICANT: Waisman, David M. E. REFERENCE: ME03-009 RENT APPLICATION NUMBER: US/10/735,577 RENT FILLING DATE: 2003-12-12 RENT FALLING DATE: 2003-12-12 RENT FILLING DATE: 2003-12-12		: -	n o	ά κ	-10-242-333A-4338 -10-085-783A-4556	Sequence	L L	
1 135-577-16 Ence 16, Application US/10735577 Encion No. US20040142897A1 EAL INFORMATION: Compositions and Methods ER OF INVENTION: Compositions and Methods RENT APPLICATION NUMBER: US/10/735,577 ERENT FILING DATE: 2003-12-12 ERENT FILING DATE: 2003-12-12 ENEW FILING DATE: 2003-12-12			`	9	0001-0001-000-01-	מלומסוור	ว้	
1 735-577-16 Ence 16, Application US/10735577 ication No. US20040142897A1 LICANT: Waisman, David M. LE OF INVENTION: Compositions and Methods EREFERENCE: ME03-009 ENT APPLICATION NUMBER: US/10/735,577 RENT FILLION DATE: 2003-12-12 RENT FILLION DATE: US 60/433,140					ALIGNMENTS			
1 735-577-16 ence 16, Application US/10735577 enction No. US20040142897A1 RAL INFORMATION: LICANT: Waisman, David M. E. REFERENCE: ME03-009 RENT APPLICATION NUMBER: US/10/735,577 RENT FILING DATE: 2003-12-12 RENT APLICATION NUMBER: US/10/735,577								
735-577-16 ence 16, Application US/10735577 ication No. US20040142897A1 EAL INFORMATION: LICANT: Waisman, David M. E REFERENCE: ME03-009 EREPERENCE: ME03-009 ERENT APPLICATION NUMBER: US/10/735,577 ERENT FILLING DATE: 2003-12-12 EREPERENCE: WE03-009 ENERGY APPLICATION NUMBER: US/00/433,140 ENERGY EALTON NUMBER: US/003-13-12			•		,			
7 nd Methods 735,577 3,140	18-10-735-577-16	vo						
Udv14289/A1 David M. Compositions and Methods 03-009 N NUMBER: US/10/735,577 E. 2003-12-12 NUMBER: US 60/433.140	Sequence 16, A	Applicat	ion US/	107	35577			
David M. Compositions and Methods 03-009 N NUMBER: US/10/735,577 E: 2003-12-12 NUMBER: US 60/433.140	CENTEDAL INFORM	WATTON:	1401428;	J/AI				
TITLE OF INVENTION: Compositions and Methods for Inhibiting Tumor Growth and Metast; FILE REFERENCE: ME03-009 ; CURRENT APPLICATION NUMBER: US/10/735,577 ; CURRENT FILING DATE: 2003-12-12 : PRIOR APPLICATION NUMBER: US 60/433,140	GENERAL INFORM	in the state of th	2000					
FILE REFERENCE: ME03-009 ; CURRENT APPLICATION NUMBER: US/10/735,577 ; CURRENT FILING DATE: 2003-12-12 : PRIOR APPLICATION NUMBER: US 60/433,140	TITIE OF INVE	TATTON:	Compa		and Methode for Inhihi	Timor Transf	routh and	Moran
CURRENT APPLICATION NUMBER: US/10/735,577 CURRENT FILING DATE: 2003-12-12 PRIOR APPLICATION NUMBER: US 60/433,140	FILE REFERENC	CE: MEO3	-009	2	is and recined to the times	Towns Service		
; CURRENT FILING DATE: 2003-12-12 ; PRIOR APPLICATION NUMBER: US 60/433,140	CURRENT APPLI	ICATION	NUMBER:	us	/10/735,577			
PRIOR APPLICATION NUMBER: US 60/433,140	CURRENT FILIN	NG DATE:	2003-	-12-	. 2]			
)	PRIOR APPLICA	ATION NU	MBER: L	35 6	0/433,140			

```
Sequence 16, Application US/10/35577; Publication No. US20040142897A1
GENERAL INFORMATION:
TITLE OF INVENTION: Compositions and Methods for Inhibiting Tumor Growth; FILE REFERENCE: ME03-009; CURRENT PAPLICATION NUMBER: US/10/735,577
CURRENT FILING DATE: 2003-12-12; PRIOR APPLICATION NUMBER: US 60/433,140
PRIOR PAPLICATION NUMBER: US 60/433,140
PRIOR FILING DATE: 2002-12-13
NUMBER OF SEQ ID NOS: 160
SOFTWARE: Microsoft Word
SEQ ID NO 16
LENGTH: 1199
TYPE: DNA
ORGANISM: mammalian
ORGANISM: mammalian
US-10-735-577-16
Best Local Similarity 100.0%; Pred. No. 0; Mismatches 1199; Conservative 0; Mismatches 0; Indels 0; Gaps
```

ö

61 AGCTTATCTGGTATTTACTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120

8 8

a

Metastası

8 & 8

ે

QC

\$ B \$

8 6 B

8 6 8 6

6 B 6 B 6 B 6

ò

\$ B

```
for Inhibiting Tumor Growth and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1020
                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAAATCAA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                 09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGTAGCTTATCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGTGGGTAGAGGGAGGGGGGGGGGAGGGGGGAGGAGCCTGGCGGGGGGCGCTCGGCAGGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1019 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGGTGTGTCGTTGAAGCCTTGACCGAGGCGCGGACGCTGGGCGGACGCTGGGCTGGGCGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u> CTGGACGCGGGGCGGAGGCGAGCGGGCGGGCTGTGCGTTCCTTAGTACGTGCGGC</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAACTAAAAAGAACTTTATTTATTGGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                DB 19; Length 1199
                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                   Methods
                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1199; Conservative 0; Mismatches
                                                               Sequence 17, Application US/10735577;
Publication No. US20040142897A1;
GENERAL INFORMATION:
APPLICANT: Waisman, David M.
TITLE OF INVENTION: Compositions and Methods;
FILE REFERENCE: ME03-009;
CURRENT APPLICATION NUMBER: US/10/735,577;
CURRENT FILING DATE: 2003-12-12;
PRIOR APPLICATION NUMBER: US 60/433,140;
PRIOR FILING DATE: 2002-12-13;
NUMBER OF SEQ ID NOS: 160;
SOFTWARE: Microsoft Word
                                                                                                                                                                                                                                                                                               TYPE: DNA
COGANISM: mammalian
US-10-735-577-17
                                                 US-10-735-577-17/c
                                                                                                                                                                                                                                                                                  1199
                                                                                                                                                                                                                                                                  SEQ ID NO 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGGTCTCGG 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGGTCTCGG 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAACCAGAGGTAACCGGCTCTGC 1020
                                                                                                                                                                                                                                                                                                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                  240
                                                                                                                                   240
                                                                                                                                                                300
                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             960
                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGGCCTGCGCCAGTGGAGGGGGGGCACCTCCCCAGAAGCCGGGCTTCCCGGCCCCACGG 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cedectrececearedadesecedeacerececasaacedeserrecedeecedes 1199
AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCCCCACCCTGAGCCTGCCCTTCTTCGGGTTTGGTTTTAGAAAGTGTACAAATCAAA
                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                     GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGETGTGGTCGTTGAAGCCTTGGCCGAGGCGCGGGGGGAGCTGGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGTGGGTAGAGGGAGGGGGGGGGGGGGGGGGGGGGCTCGGCGGCTCGGCGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCCCCCAGCCCTGTCTCCTCCCCCTTTCTTCCTCCCCCGACTCCCCCGACCCCGGGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACCCGGCCGTCCTGCGGGTGGGCACGCTGGCCAGAACCAGAACCAGAACCTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG
                                TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCAACTGCTCATT
                                                                                                                                                                                                                                GTGAGGCCCGCAATTAGGGAAAAAAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                               TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGGTGTGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGTGGGTAGAGGGGGGGGGGGGGGGGGAGGAGGCCTGGCCGGCGCGCTCGGCAGGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCCCCAGCCCTGTCTCCTCCCCCTTTCCTGCCCCCGACTCCCCCGACCCCGGGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTTGGTTTTAGAAAGTGTACAAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGACGCGGGGGGGAAGGCGAGCGCGCGCGCTGTGCGCTTTCCTTAGTACGTGCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGCCCACGCCCTCGCTCCCGGACCCGCCTCGCAGAGGCCTTCGCCCCCCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1141
                                                                121
                                                                                                 181
                                                                                                                               181
                                                                                                                                                                 241
                                                                                                                                                                                                241
                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1141
                                121
                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
```

g

S 8

8 6 ð g

δ ያ ያ

a ઠે ద ઠે g

8

```
240
                                                                  300
                                                                                                                                                                                                         420
                                494
                                                                                               GIGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                              GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                      GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 374
                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 314
                                                                                                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 194
                                                                                                                                                                                                                                                                                                                                                                                                                                      TIGGIGGICGITGAAGCCITGAGCCGAGGCGGGCGGACGATGGGCGAGGAGGGGGGGAGGAGG
                                                                                                                                                                                                                                                                                          ITGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGAC------GCTGGGCGAG 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGGCGAGCTGGACGCGGGGGGAGAGCGCGCGGCGGCGGCTGTGCCTTAGT 651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         553 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence S66, Application US/09925301
; Sequence S66, Application US/09925301
; Patent No. US2002002308A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVERTION: Nucleic Acids, Proteins and Antibodies
; TITLE OF INVERTION: Nucleic Acids, Proteins and Antibodies
; TURENT APPLICATION NUMBER: US/09/925,301
; CURRENT FILING DATE: 2001-08-10
; PRIOR FILING DATE: 2000-03-08
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 1694
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO S86
LENGTH: 1893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COCATION: (1184)

OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc_feature
LOCATION: (1865)

OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc_feature
LOCATION: (1883)

OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCAGGCGCTCC 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TENUL...

TYPE: DNA
OKGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
', ~~aTION: (1184)
                                                                  241
                                                                                                                                    301
                                                                                                                                                                       433
                                                                                                                                                                                                         361
                                                                                                                                                                                                                                         373
                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                            313
                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                              253
                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                  193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13
 181
                                                                                                                                                          음 장
 8 6
                                                                  8 8
                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                    8 8 8
                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      임
                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1, Application US/10044090; Publication No. US20020137081A1
GENERAL INFORMATION:
APPLICANT: Olga Bandman
TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
FILE REPREBACE: PA-0028 US
CURRENT APPLICATION UNMER: US/10/044,090
CURRENT FILING DATE: 2002-01-09
NUMBER OF SEQ ID NOS: 850
SOFTWARE: PERL PROGRAM
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                1081 TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG 1140
                                                                                                                                                                                                                                                                           961 GAACCCGGCCGTCCTGCGGGCTGGGCACGTGGCGAGAACCAGAGGTAACCGGCTCTGC 1020
                                                                                                                                                                                                                                                                                                                                            1021 GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                        419 CGGCCCACGCCCTGCCTCCCCGGACCCGCTCGCAGAGGCCTCGCCCCCAGAC 360
                                                                                                                                    AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTTCCTCGAATATTTCAGGGC 900
                                                                                                                                                      239 GAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAGACCAGAGGTAACCGGCTCTGC 180
                                                                                                                                                                                                                                                                                                                                                              TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        613 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 554
                         CTCCCCCAGCCCTGTCTCCTCCCCCTCTTCTTCTGCCCCCGACTCCCCGGACCCCGGGGGGG 420
                                                                                                                                                                                                         ATCCCCACCCTGAGCCTGCCCTTCCTCTGGTTTTGGTTTTAGAAAGTGTACAAATCAAA 960
                                                                                                                                                                                                                                                                                                                                                                                                                                      119 TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG 60
                                                                  COCCCACACOCCTCCCTCCCCGAACCCGCCTCGCAGAGCCTCGCCCCGCCCCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           58.7%; Score 703.4; DB 13; Length 1124; ilarity 98.6%; Pred. No. 2.2e-197; Conservative 0; Mismatches 1; Indels 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:

NAME/KEY: misc feature

OTHER INFORMATION: Incyte ID No. US20020137081A1 400788.4

NAME/KEY: unsure

CCATION: 1014, 1054, 1119

JCCATION: 1014, 1054, 1119

US-10-044-090-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 723; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 3
US-10-044-090-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 1124
                                479
                                                                                                                                                                       359
                                                                                                                                    841
                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
721
                                                                  781
```

원

8

<u>ና</u> ይ

a ò S S ò

```
1416 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTGTTAAGTAGCCTTTATCCCCA 1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1356 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAGGCCCGCAATTAGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1656 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GIGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGGTGTGGTCCGTTGAAGCCTTGGCCGAAGCGCGGCGGACGCTGGGCGAGCTGGGCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1836 GGAACTAAAAAGGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GGAACTAAAAAAAAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 52.9%; Score 634; DB 10; Length 1893; Best Local Similarity 100.0%; Pred. No. 1.1e-176; Matches 634; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGACGCGGGGGGAGAGGCGAGCGCGGGGC 634
                                                                                                                     O
                                                                                                                                                                              υ
                                                                                                                                                                                                                                         υ
                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature
LOCATION: (1893)..(1893)
OTHER INFORMATION: n equals a,t,g, or
                                                                                                                     or
                                                                                                                                                                              or
                                                                                                                                                                                                                                         ŏ
                                                                                                                                                                                                                                                                                                    ö
                                                                                                                    a,t,g,
                                                                                                                                                                                a,t,g,
                                                                                                                                                                                                                                                                                                    a,t,g,
                                                                                                    LOCATION: (1184)..(1184)
OTHER INFORMATION: n equals
FEATURE:
                                                                                                                                              NAME/KEY: misc feature
LOCATION: (1865)..(1865)
OTHER INFORMATION: n equals
                                                                                                                                                                                            FEATURE:
NAME/KEY: misc_feature
LOCATION: (1883)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY: misc feature
LOCATION: (1887)
..(1887)
FEATURE:
 SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 13
                           LENGTH: 1893
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                        NAME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                        FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                        1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 1657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1296 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGCGGCGGCGGCGGCGAGCTGGGCGAG 1237
                                                                                                                                                                             GCAGATTCCTTAAGCGACCCTTTGGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT 1597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                       GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGGTGTGTCGTTGAAGCCTTGGCCGAGGCGCGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                               Gaps
                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Sequence 13, Application US/0997003; Publication No. US20030203361A1; GENERAL INFORMATION:
TITLE OF INVENTION:
TITLE OF INVENTION:
CURRENT FILE REFRENCE:
PLOST FOR TRING DATE: 2001-11-30; PRIOR APPLICATION NUMBER: US/09/997,003
CURRENT FILING DATE: 2001-11-30; PRIOR APPLICATION NUMBER: US/09/997,003; PRIOR APPLICATION NUMBER: PCT/US00/22157; PRIOR FILING DATE: 1999-08-13; NUMBER OF SEQ ID NOS: 56
                                                                                                      9; Length 1893;
                                                                                                                                0; Indels
                                                                                                    Query Match 52.9%; Score 634; DB 9; Lv
Best Local Similarity 100.0%; Pred. No. 1.1e-176;
Matches 634; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACGCGGGGGGAGAGGCGAGCGCGGGGC 634
                  υ
                                                            or
                  ö
LOCATION: (1887)
CTHER INFORMATION: n equals a,t,g,
NAME/KEX: misc feature
LOCATION: (1893)
CTHER INFORMATION: n equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
US-09-997-003-13/c
                                                                                                                                                                                                                                                                                                                1716
                                                                                                                                                                                                                                                                                                                                                                         1656
                                                                                                                                                                                                                                                                                                                                                                                                                                    1596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1236
                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                             음 &
                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                         중 옵
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>ک</u> ۾
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

ò

1597

240

1657

180

1777

9

ö

1717

120

1477

420

480

S

```
GGGAACTCCTTTTCCATGAGTACTCTGAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGAATTTGTGAAAGTATAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGGAGCGAACTGCTCATT 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                           APPLICANT: Dai, Hongue
APPLICANT: Dai, Hongue
APPLICANT: Linaley, Peter
APPLICANT: Linaley, Peter
APPLICANT: Mao, Mao
APPLICANT: Roberts, Chris
APPLICANT: Van 't Veer, Laura
APPLICANT: Van 'e Veer, Laura
APPLICANT: Van de Vijover, Marc
APPLICANT: Van de Vijover, Van de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        649 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGCGAAAAGAAGCTCTGGAAGCCATCTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 50.1%; Score 601; DB 17; Length 649; Best Local Similarity 99.7%; Pred. No. 3.7e-167; Matches 623; Conservative 0; Mismatches 0; Indels
                                 625
                                                              CTGGACGCGGCGGAGAGCGAGC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
CRGANISM: Homo sapiens
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: NM 002966
DATABASE ENTRY DATE: 2001-06-18
US-10-172-118-847
                                                                                                                                                                                                                    ; Sequence 847, Application US/10172118
; Publication No. US20030224374A1
; GENERAL INFORMATION:
                                                                                                                                                                                             -10-172-118-847/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        410
                               601
                                                                                  21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           중. B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   649 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATGAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 AAGCTTATCTGGTATTTAACTTTTCTTTCTTGTCTAAATGAGATTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTACATTTGCTAAGTGTCCTGATCTCGTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAGGTCCTTCATTATTTTGTCCACAGCGCTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   290 TCCAGGICCTICATTATTITGTCCACAGAGGGTCTTTTTTGATTTTCCAAAAATCCA 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         230 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTTATCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     170 GCGAATTTGTGAAATGTAAACATCGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541 TTGGTGTGGCCTTGAAGCCTTGGCCGAGGCGCGGAGCGTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           350 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGATTCCTTAAGCGACCCTTT - GGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                             Sequence 2350, Application US/09880107
; Sequence 2350, Application US/09880107
; Parent No. USZ0020142981A1
; GENERAL INFORMATION:
; APPLICANT: Horne, Darci T.
; APPLICANT: Occkley, Joseph G.
; APPLICANT: Gene Logic, Inc.
; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer; TITLE OF INVENTION UNMBER: US 60/211,379
; PRIOR PILING DATE: 2000-06-14
; PRIOR PILING DATE: 2000-06-14
; PRIOR FILING DATE: 2000-10-02
; NUMBER OF SEQ ID NOS: 3950
; SOFTWARE: PATENTIN Ver. 2.1
; SEQ ID NO 2350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: Genbank Accession No. US20020142981A1 M38591
US-09-880-107-2350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 50.1%; Score 601; DB 9; Length 649; Best Local Similarity 99.7%; Pred. No. 3.7e-167; Matches 623; Conservative 0; Mismatches 0; Indels
  1236 CTGGACGCGGGGGGAGAGCCGAGCGCGCGCGCC 1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
```

ઠે

590 120 530 180

9

240

291

52

```
301 GTGAGGCCCGCAATTAGGGAAAAGACCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       529 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       230 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTGTTAAGTAGCTCTTTATCCCCA
                                                                                     541 TTGGTGTGCTCCGTTGAAGCCTTGGCCGAGGCGCGCGGCGGACGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2;
                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Mark BAKER
APPLICANT: John Nicholas WOOD
APPLICANT: Misbah MALIK-HALL
TITLE OF INVENTION: SODIUM CHANNEL REGULATORS AND MODULATORS
FILE REFERENCE: 117-492 / N.86242A GCW
CURRENT APPLICATION NUMBER: US/10/487,337
CURRENT PILING DATE: 2004-02-20
PRIOR APPLICATION NUMBER: PCT/GB02/03852
PRIOR APPLICATION NUMBER: GB 0120238.1
PRIOR APPLICATION NUMBER: GB 0120238.1
PRIOR APPLICATION NUMBER: S001-08-20
NUMBER OF SEQ ID NOS: 55
SOFTWARE: PATCHILL OF SEC ID NOS: 55
SEQ ID NO 7
LENGTH: 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 601; DB 20;
Pred. No. 3.7e-167;
0; Mismatches 0;
                                                                                                                                                                                                       CTGGACGCGGGGGGGAGGCGAGC 625
                                                                                                                                                                                                                           CTGGACGCGGGGGGAGAGGCGAGC 27
                                                                                                                                                                                                                                                                                                                       Sequence 7, Application US/10487337; Publication No. US20040248207A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 50.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity >>.. Matches 623; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA ORGANISM: Homo sapiens FEATURE: NAME/KEY: CDS LOCATION: (112).. (402) OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                           US-10-487-337-7/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-487-337-7
                                                                      481
                                                                                                                                                                                                       601
     121
                                                                                                                                                                                                                                       51
                            요
                                                                  ò
                                                                                            g
                                                                                                                                   ò
                                                                                                                                                             g
                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 649 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                   TIGGIGIGGICCGITGAAGCCITGGCCGAGGCGCGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          291
GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rccaggrccrrcarrarrrgrccacaggccagaggrcrrrrgarrrccaaaaarcca 231
                                                                  52
                                                                                                                                                                                                                                                              APPLICANT: Dai, Hongyue
APPLICANT: Dai, Hongyue
APPLICANT: Dai, Hongyue
APPLICANT: Linsley, Peter S.
APPLICANT: Ano, Mao
APPLICANT: Roberts, Christopher J.
APPLICANT: Van 't Veer, Laura Johanna
APPLICANT: Van 't Veer, Laura Johanna
APPLICANT: Van de Vijver, Marc J.
APPLICANT: Bernards, Rene
APPLICANT: Bernards, Rene
APPLICANT: Bernards, Rene
TITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Patients
TILE OF INVENTION: Diagnosis and Prognosis of
CURRENT FILING DATE: 2001-18
PRIOR APPLICATION NUMBER: 60/298,918
PRIOR FILING DATE: 2002-05-14
PRIOR APPLICATION NUMBER: 10/172,118
PRIOR PLING DATE: 2002-05-14
PRIOR PLING DATE: 2002-05-14
SEQ ID NO 847
LENGTH: 649
                                                        TTGGTGTGGTCCGTTGAAGCCTTGG-CGAGGCGGGGGGACGCTGGGCGAGCTGGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCAACTTTGCCATCTTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 601; DB 18;
Pred. No. 3.7e-167;
0; Mismatches 0;
                                                                                                   CTGGACGCGGGGGGAGAGGCGAGC 625
                                                                                                                                 creakcececeaadadeceaac 27
                                                                                                                                                                                                                     ; Sequence 847, Application US/10342887; Publication No. US20040058340A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 50.1%;
Best Local Similarity 99.7%;
Matches 623; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-342-887-847
                                                                                                                                                                                    RESULT 8
US-10-342-887-847/c
                                   541
                                                                  110
                                                                                                   601
                                                                                                                                   51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         290
                                                                g
                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
                               ð
                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

7

120 530 180 240

590

Db 350 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 291	qq	290 TCCAGGICCITCATTATTITGICCACAGGGGTCTTTITGATTTICCAAAAAICCA 231
OY 361 TCCAGGTCCTTCATTATTTGCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCA 420	\$ 8	421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCTTTATCCCA 480 [
OY 421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480	oy Og	481 GCGAATTIGTGAAATGTAAACATCATGGGTTCCCATGGCGTGTTCCATTIGAGATGGCATT 540
OY 481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540	SP G	541 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGGCGGACGCTGGGCGAGCTGGGCGAG 600
Qy 541 TIGGIGIGGICGICGITGAAGCCTTGGCCGAGGCGGACGCGAGGCGAG	ç ç	601 CTGGACGCGGAGAGGCGAGC 625
Qy 601 CTGGACGCGGAGGCGGAGC 625	RESULT 1 US-10-95	1 5-157-6214/c ce 6214. Application US/10956157
RESULT 10 US-10-956-157-979/c ; Sequence 979, Application US/10956157 ; Publication No. US20050118625A1 ; ADDISCATION:	Public GENERA HAPPLI APPLI TITLE	; Publication No. US20050118625A1 ; GENERAL INFORMATION: ; APPLICANT: Wyeth, William ; APPLICANT: Wounts, William ; TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH
APPLICANT: WOULD WILLIAM APPLICANT: MOUNTS, WILLIAM TITLE OF INVENTION: NUCLEIC ACID ARRAYS FOR DETECTING GENE EXPRESSION ASSOCIATED WITH TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES TITLE OF INVENTION: HUMAN OSTEOARTHRITIS AND HUMAN PROTEASES CURRENT APPLICATION NUMBER: US 10/956,157 CURRENT APPLICATION NUMBER: US 10/956,157 NUMBER OF SEQ ID NOS: 319805 SOFTWARE: PALENTIN VERSION 3.2 SEQ ID NO 979	တိ လွ	LILE REFERENCE: 031895-043000 (AM 101081) CURRENT APPLICATION NUMBER: US/10/956,157 CURRENT FILING DATE: 2004-10-04 NUMBER OF SEQ ID NOS: 319805 SOFTWARE: Patentin version 3.2 SEQ ID NO 6214 LENGTH: 649 LENGTH: 649 ORGAN: Homo sapiens ORGAN: Homo sapiens
; LENGTH: 649 ; TYPE: DNA ; ORGANISM: Homo sapiens US-10-956-157-979	Query Match Best Local S Matches 623	<pre>datch</pre>
Query Match 50.1%; Score 601; DB 21; Length 649; Best Local Similarity 99.7%; Pred. No. 3.7e-167; Matches 623; Conservative 0; Mismatches 0; Indels 2; Gaps 2;	oy Q	1 GGAACTAAAAAAGAACTTTATTTGAGGCCAAGGGGATGCAAACAATACAAAAATCAA 60
OY 1 GGAACTAAAAAGAACTTTATTTAAGGGGAAGGGGATGCAAACAATACAAAATGAA 60 ·	oy Op	61 AAGCTTATCTGGTATTTAACTTTTCTTTCTTGTCAAATGAGAGTTAGATTTTATT 120
QY 61 AAGCTTATCTGGTATTTAACTTTTCTTTGTCAAATGAGAGTTAGATTTAATT 120 	ç qa	121 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAATCCTTCTATGGGGGAAGCTGTGGG 180
OY 121 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180	çy Dp	181 GCAGATTCCTTAAGGGACCCTTTGGGACAACTCTTATCAGGAGGAGCGAACTGCTCATT 240
OY 181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240	çy Pb	241 TCTGCCTACTTCTTTCCCTTCTGCTTCATGTACTACAAATAGTCATTGCATGCA
OY 241 TCTGCCTACTTCTTCCCTTCTGCTTCTGTACTACAAATAGTCATTGCAATG 300	장 엽.	301 GTGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
OY 301 GTGAGGCCCGCAATTAGGGAAAAGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTCG 360	oy Pp	361 TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAATCCA 420
Qy 361 TCCAGGTCCTTCATTATTTGTCCACAGCGAGGGTCTTTTTGATTTTCCAAAAATCCA 420	ò	421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTGTTAAGTAGCCTTTATCCCCA 480

```
546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                     361
                                                                                                                                                                                                  242
                                                                                                                                                                                                                                                                              182
                                                                                                                                                                                                                                                                                                                                                                                                    541
                                       421 cagariccinaagcgacccinicggacaacicinarcagggaggaggaggaacrgcrcarir 362
                                                                                                                                                                                                                                         CCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAG 421
                                                                                                                                                                                                                                                                                                                   422 GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAG 481
                                                                                                                                                                                                                                                                                                                                                        181 GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAG 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                         62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Wang, David G.

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
ITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REPERENCE: 108827.129
CURRENT FILING DATE: 2002-04-30
FRIOR PELICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-12
PRIOR PLICATION NUMBER: US 60/198,676
PRIOR FILING DATE: 2000-07-12
PRIOR FILING DATE: 2000-07-29
PRIOR FILING DATE: 2000-03-29
PRIOR FILING DATE: 2000-03-29
PRIOR FILING DATE: 2000-02-24
PRIOR FILING DATE: 2000-02-34
PRIOR FILING DATE: 1999-11-23
PRIOR FILING DATE: 1999-11-23
PRIOR FILING DATE: 1999-10-23
PRIOR FILING DATE: 1999-09-28
PRIOR FILING DATE: 1999-08-09
NUMBER OF SEQ ID NOS: 325720
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 261591
                                                                                                                                                                                 241 CCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAATAGTCATTGCAATGG
                                                                                                                                                            TGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                  CGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                       121 cGAATTIGIGAAATGIAAACAICAIGGITICCAIGGCGIGITCCATTIGAGAIGGCATTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     regreredrecerreaecerregeceaegecegecegaecregeceaecregeceaec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         532 GATGGCATTTTGGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    592 CTGGGCGAGCTGGACGCGGGGGGGGCGCGCGCGGCGGCGCGCCTTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 13; Length 608;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 577.4; DB 13;
Pred. No. 3.6e-160;
1; Mismatches 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 261591, Application US/10027632
Publication No. US20020198371A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 97.0%;
Matches 587; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-027-632-261591/c
                                                                                242
                                                                                                                                                            302
                                                                                                                                                                                                                                         362
                                                                                                                                                                                                                                                                                                                                                                                                    482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                            8
                                                                                                               a
                                                                                                                                                          à
                                                                                                                                                                                             a
                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601 GAACTAAAAAGACCTTTATTTATTGAGGCGAGGGGATGCAACCAATNCAAAAATCAAA 542
                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                     TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGCGACGCTGGGCGAAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 AGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTT 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTTCTATGGGGGAAGCTGTGGGGG 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          230 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 171
                                                                                                                                                            25
                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                          110 TTGGTGTGGTCCGTTGAAGCCTTGG-CGAGGCGGGGGGCGACCCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 GAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 663;
                                                                                                                                                                                                                                                                                                                                                                                       JOHEANAT: Birse et al.

TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE:
CURRENT APPLICATION NUMBER: US/10/264,049
CURRENT PILING DATE: 2002-10-04
FRIOR APPLICATION NUMBER: PCT/US01/18569
FRIOR APPLICATION NUMBER: PCT/US01/18569
FRIOR PILING DATE: 2001-06-07
FRIOR PILING DATE: 2001-06-07
FRIOR FILING DATE: 2000-06
SOFTWARE: PATENTION NUMBER: US 60/209,467
NUMBER OF SEQ ID NOS: 4360
SOFTWARE: PATENTION VET: 3.1
SEQ ID NO 1114
LENGTH: 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          49.7%; Score 595.8; DB 17; 99.5%; Pred. No. 1.3e-165;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                  crecacececedadadeceaec 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEY: misc feature
LOCATION: (661)..(661)
OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                    ; Sequence 1114, Application US/10264049; Publication No. US20040005579A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: (553)..(553)
OTHER INFORMATION: n equals a,t,g,
RAATURE:
NAME/KEY: misc_feature
LOCATION: (602)..(602)
OTHER INFORMATION: n equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: misc_feature
LOCATION: (656)..(657)
OTHER INFORMATION: n equals a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a,t,g,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: misc feature
LOCATION: (623)...(623)
OTHER INFORMATION: n equals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 99.5
Matches 597; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature
LOCATION: (553)..(553)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                     US-10-264-049-1114/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-264-049-1114
                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122
                                         481
                                                                            170
                                                                                                                                                                                                  601
                                                                                                                                                                                                                                     51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                        g
                                                                                                                                                ద
                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                     ò
                                                                                                                   ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
```

ö

σ

546

651

711 426 366 831

g

ò

g

ઠે g 8

891

951

99

591

a ò a ઠે g ઠે 8 ઠે

```
245 TTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTTGGTTTTAGAAAGTGTA 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     952 CAAATCAAAGAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAACCAGAGGTAAC 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1012 GGGCTCTGCGGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGG 1071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1072 CACGIGGAGICCIAICGACCICAGAGGCACIAICAGAIIAGCCCIAGGAGGICCGICIGG 1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 365 CCGGGGCGCCCCACGCCCTGCCTCCCGGACCCGCCTCGCAGAGGCCTCGCCC 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                 712 GGCAGGGCGCTCCCCCAGCCCTGTCTCCTCCTCCTGCCCCCGACTCCCCGACC 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACGTGKAGTCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGG 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCAGGGCCTCCCCCAGCCCTGTCTCCTCCCCCTCTTCCTGCCCCCGACTCCCCCGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     125 CGGCTCTGCGGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGG
                                                                                                GCCCCAGACAGAGCGTTCTTGTAAACTTCTTCAGTAGAAACGGTCCTGCTCTCGAATA
                                                               GATGGCATTTTGGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGACGCTGGGCGAG
                                                                                                                                                                                          772 CCGGGCGCGCGCCCACGCCCTGCCCTCGCTCCCGGACCCGCCTCGCAGAGGCCTCGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTTGGTTTTAGAAGTGTA
                                                                                                                                                                                                                                                                                                                         652 ACGTGCGGCGGGTGGGTAGAGGGAGCGGCGCGGGAGCGGGGAGGAGCCTGGCGGGCCTC
   Gaps
   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 890, Application US/09920300A
; Sequence 890, Application US/09920300A
; Patent No. US20020136728A1
; GENERAL INFORMATION:
    APPLICANT: King, Gordon E.
; APPLICANT: Madeleine Joy
; APPLICANT: Xu, Jiangchun
; APPLICANT: Xu, Jiangchun
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER
; FILE REFERENCE: 210121.547
; CURRENT FILING DATE: 2001-07-31
; NUMBER OF SEQ ID NOS: 1789
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 890
   17; Indels
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
PEATURE:
NAME/KEY: misc_feature
LOCATION: 29, 40, 139, 211, 351, 379, 559
COTHER INFORMATION: n = A,T,C or G
   587; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1132 GGGTC 1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 15
US-09-920-300A-890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 571
                                                                                                                           605
                                                                                                                                                                                          592
                                                                                                                                                                                                                                                      545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           65
   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                  8 8
                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                             ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACGTGGAGTCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGG 1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      305 GCCCCAGACAGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATA 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   245 TTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTGGTTTTAGAAAGTGTA 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Acerecescescesces Adams Aceres Secons Aceres Aceres
                                                                                                                                                                                                                                                                                       831
                                                                                                                                                                                                                                                                                                                                                                                                               GCCCCAGACAGAGGGTTCTTGTAAACTTCTCTTCAGTAGAAAGGGTCCTGCTCTCGAATA 891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITCAGGGCATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTGGTTTTAGAAAGTGTA 951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65 CACGTGKAGTCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGG 6
                                                                                                                                                         GGCAGGCGCTCCCCCAGCCCTGTCTCCTCCTCTTCCTGCCCCCGGACTCCCCGGACC
                                                                                                                                                                                                                                                                                    CCGGGCGCGCCCACGCCCTGCCTCCCGGACCCGCCTCGCAGAGGCCTCGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 10827.129
FILE REFERENCE: 10827.129
CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT APPLICATION NUMBER: US/0218,006
FRIOR FILING DATE: 2000-04-20
FRIOR APPLICATION NUMBER: US 60/198,676
FRIOR FILING DATE: 2000-04-20
FRIOR FILING DATE: 2000-03-29
FRIOR FILING DATE: 2000-03-29
FRIOR APPLICATION NUMBER: US 60/193,483
FRIOR FILING DATE: 2000-03-29
FRIOR APPLICATION NUMBER: US 60/185,218
FRIOR APPLICATION NUMBER: US 60/167,363
FRIOR FILING DATE: 1999-108-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 577.4; DB 17; Length 608; Pred. No. 3.6e-160;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 325720
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 261591
LENCTH: 608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 14
US-10-027-632-261591/c
; Sequence 261591, Application US/10027632
; Publication No. US20030204075A9
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     48.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGTC 1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5 GGGTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Human
US-10-027-632-261591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1132
                                                                                      485
                                                                                                                                                     712
                                                                                                                                                                                                                     425
                                                                                                                                                                                                                                                                                    772
                                                                                                                                                                                                                                                                                                                                                   365
                                                                                                                                                                                                                                                                                                                                                                                                               832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1012
```

ö

9 87 120

147

180

207

240

267 300 360 387 420 447 480

540 507

567

```
GTGAGGCCCGCAATTAGGGAAAANAAGCTCTGGAAGCCCACTTTGCCATCTNTACACTGG
                                                                                                                88 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTANATTTAATT
                                                                                                                                                                                          148 ritacaririscia agrerectearerectearea arceretrora escase escretes
                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGAATTTGTGAAATGTAAACATGGTTTCCATGGGGGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             508 GCGAATITGTGAAATGTAAACAICATGGTTTCCATGGCGTGTTCCATTTGANATGGCATT
                                                             28 GNAACTAAAAANAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                               AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                              TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                         208 GCANATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                  TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                  1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAAACAATACAAAATCAA
                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
   ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 571;
   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
   .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 537; DB 16;
Pred. No. 3.3e-148;
0; Mismatches 7;
   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature; LOCATION: 29, 40, 139, 211, 351, 379, 559; OTHER INFORMATION: n = A,T,C or GUS-10-099-926-890
   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 98.7%;
Matches 537; Conservative
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-099-926-890
   537;
                                                                                              61
                                                                                                                                                            121
                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                     328
                                                                                                                                                                                                                                                                                                                                                                                                                                                   388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                    361
   Matches
                                                         요
                                                                                              ò
                                                                                                                                                            ò
                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                             AGCTTATCTGGTATTTAACTTTTCTTTCTCTGTCAAATGAGAGTTANATTTTATT 147
                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGGCCCGCAATTAGGGAAAANAAGCTCTGGAAGCCCCACTTTGCCATCTNTACACTGG 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                            TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAAAGAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GNAACTAAAAAANAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 87
                                                                                                                                                                                                              TITACATITICCIAAGICICCIGAICTCCCATGAAATCCTICTATGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                          GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                           GCANATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                GGAACTAAAAAGAACTTTATTTATTGGGGCAAGGGGATGCAAACAATACAAAATCAA
                                  Gaps
                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 890, Application US/10033528
; bublication No. US20020131971A1
; GENERAL INFORMATION:
APPLICANT: King, Gordon E.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Xu, Jiangchun
; APPLICANT: Xu, Jiangchun
; APPLICANT: Secrist, Heather
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER
; TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER
; TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER
; TURRENT APPLICATION UNDRER: US/10/033,528
; CURRENT FILING DATE: 2001-12-26
; NUMBER OF SEQ ID NOS: 1896
; SOFTWARE: FRAISE (for Windows Version 4.0
; SEQ ID NO 890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        44.8%; Score 537; DB 13; Length 571; 98.7%; Pred. No. 3.3e-148;
Length 571;
                                 7; Indels
Score 537; DB 9; I
Pred. No. 3.3e-148;
0; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:

NAME/KEY: misc feature

LOCATION: 29, 40, 139, 211, 351, 379, 559

US-10-033-528-890
Query Match
Best Local Similarity 98.7%;
Matches 537; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tree 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 16
US-10-033-528-890
                                                                                                                                                                                                                                                                                                                                                                                                                    328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                             61
                                                                                                                                                                                            121
                                                                                                                                                                                                                         148
                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                        208
                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                       268
                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             208
                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OD
Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                       원
                                                                                                                                                    g
                                                                                                                                                                                                              유장
                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                      8 6
                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                          ò
                                                                                                                                                                                        ò
```

ö

9 87

Gaps

240

셤

8 6 ठे 8 ð a

ద 8 δ g 유

ò g ठे

ઠે

g

ò g

```
Sequence 47618, Application US/10242535A

Publication No. US20040013663A1

GENERAL INFORMATION:
APPLICANT: ChondroGene Inc.
APPLICANT: ChondroGene Inc.
TITLE OF INVENTYON: Compositions and Methods Relatiing to Osteoarthritis
FILER REFERENCE: 4211/2005
CURRENT APPLICATION NUMBER: US/10/242,535A

CURRENT APPLICATION NUMBER: US 10/085,783

PRIOR FILING DATE: 2002-09-12

PRIOR FILING DATE: 2001-07-13

PRIOR FILING DATE: 2001-07-13

PRIOR APPLICATION NUMBER: US 60/305,340

PRIOR FILING DATE: 2001-07-13

PRIOR APPLICATION NUMBER: US 60/275,017

PRIOR APPLICATION NUMBER: US 60/275,017

PRIOR FILING DATE: 2001-03-28

NUMBER OF SEQ ID NOS: 58994

SEQ ID NO 47618

LENGTH: 538

LENGTH: 538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAATAGTCATTGCATG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                               TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCANATICCTIAAGCGACCCTITGGGACAACTCTTATCAGGGAGGAGGAGGAACTGCTCAIT 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         508 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGANATGGCATT 567
                                                                                                                                                                                                                                                                                           61 AAGCTTATCTGGTATTTAACTTTTCTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 207
                                                                                                                                                                                                                GCGAATTIGIGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                       GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGTATTATCCCCA
                                                                                                                                                                                    1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                               ö
                                                                             Length 571;
                                                                                                                             Indela
                                                                           Query Match

44.8%; Score 537; DB 22;
Best Local Similarity 98.7%; Pred. No. 3.3e-148;
Matches 537; Conservative 0; Mismatches 7;
; OTHER INFORMATION: n = A,T,C or US-10-961-527-890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-242-535A-47618/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGG 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                   28
                                                                                                                                                                                                                                                                                                                                             88
                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                      148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           568
                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                    ሯ
                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTATCCCA 480
                                                                                                                                                                   GCANATICCTIAAGCGACCCTITGGACAACTCTIATCAGGGAGGGAGCGAACTGCTCAIT 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGGCCCGCAATTAGGGAAAANAAGCTCTGGAAGCCCCACTTTGCCATCTNTACACTGG 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           508 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGANATGGCATT 567
                                                                                                                                                                                                                                   TITACATITICCTAAGIGICCTGAICTGCTCATGAAATCCTTCTAIGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                  TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                448 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 507
                         9
                                                                        28 GNAACTAAAAANAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAATCAA
                                                                                                                          AAGCTTATCTGGTATTTAACTTTTCTTTCTTGTGAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                             GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 890, Application US/10961527

Sequence 890, Application US/10961527

Publication No. US20050147615A1

GENERAL INFORMATION:

APPLICANT: King, Gordon E.

APPLICANT: Xu, Jiangchun Bapplicant: Servise, Headleine Joy

APPLICANT: Servise, Headleine Joy

APPLICANT: Servise, Headleine Joy

APPLICANT: Servise, Headleine Joy

APPLICANT: Servise, Headleine Joy

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY

TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER

FILE REPREBENCE: 210121.54764

CURRENT APPLICATION NUMBER: US 50/920,300

FRIOR FILING DATE: 2001-07

FRIOR FILING DATE: 2001-07

FRIOR APPLICATION NUMBER: US 60/279,763

FRIOR FILING DATE: 2001-03-28

FRIOR FILING DATE: 2001-03-28

FRIOR FILING DATE: 2001-03-28

FRIOR FILING DATE: 2000-03-28

FRIOR FILING DATE: 2000-03-8

FRIOR FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: misc_feature
LOCATION: 29, 40, 139, 211, 351, 379, 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          [|||
TTGG 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 18
US-10-961-527-890
                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                          61
                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                     148
                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                               208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
```

540

187 356 247 296 307

```
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: 5'UTR
LOCATION: 1..1434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-992-600A-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 2016
                                                                            68
                                                                                                                                                                             128
                                                                                                                                                                                                                                                                           188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                         ò
                                                                                                                       В
                                                                                                                                                                          ò
                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Sequence 47618, Application US/10085783A | Publication No. US20040037841A1 |
| Publication No. US20040037841A1 |
| GENERAL INFORMATION: ChondroGene Inc. |
| APPLICANT: ChondroGene Inc. |
| APPLICANT: Liew, C.C. |
| TILLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis |
| TILLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis |
| TILLE REFERENCE: 4231/2002 |
| CURRENT APPLICATION NUMBER: US/10/085,783A |
| PRIOR APPLICATION NUMBER: US 60/235,340 |
| PRIOR FILING DATE: 2001-07-13 |
| PRIOR FILING DATE: 2001-03-12 |
| PRIOR FILING PAPEL PRIOR DATE: 2001-03-12 |
| PRIOR FILING DATE: 2001-03-12 |
| PRIOR FILING PAPEL PAPEL STANDARD PAPEL STANDARD PAPEL STANDARD PAPEL STANDARD PAPEL STANDARD PAPEL STANDARD PAPEL PAPEL STANDARD 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ij
                                                                                                                                                                                                                                                                                                     416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTICITICCTICTICATORGENETACIACAAAATAGTCATIGCATGCAATGGTGAGGC 236
                                                                                                                                                                          TCTGGTATTTAACTTTTCTTTCTCTGTCAAATGAGAGTTAGATTTTTTTACAT 127
                                                                                                                                                                                                                                                                                                                                                   187
                                                                                                                                                                                                                                                                                                                                                                                                   356
                                                                                                                                                                                                                                                                                                                                                                                                                                                   247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATT 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26
                                                                                                                                                                                                                                                                                                                                                                                              TTGCTAAGTGTCCTGATCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCAGCGAAATT
                                                                                                                                                                                                                                                                                                rcregrarrractrrrcrcrecrrercaaargagagrragarrrarrrracar
                                                                                                                                                                                                                                                                                                                                                TTGCTAAGTGTCCTGATCTGAAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTICITICCCTICIGCTICATGIGIACIACAAAATAGICATIGCAIGCAATGGIGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 AAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTTA
                                                                                                                                                   8 AAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGAAATGTAAACATCATGG-AACCATGGCGTGTTCCATTTGAGATGGCATTTTG 1
                                                                                                   ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ij,
                                                Query Match 43.0%; Score 516; DB 17; Length 538; Best Local Similarity 98.9%; Pred. No. 5.3e-142; Matches 530; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 538;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
43.0%; Score 516; DB 18;
Best Local Similarity 98.9%; Pred. No. 5.3e-142;
Matches 530; Conservative 0; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 20
US-10-085-783A-47618/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-085-783A-47618
  JS-10-242-535A-47618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 47618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM:
                                                                                                                                                                                                                                               68
                                                                                                                                                                                                                                                                                                475
                                                                                                                                                                                                                                                                                                                                                128
                                                                                                                                                                                                                                                                                                                                                                                              415
                                                                                                                                                                                                                                                                                                                                                                                                                                                 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          428
                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                              S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                  S 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
```

```
CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT
475 TCTGGTATTTAACTTTTCTTTTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACAT
                                                                    TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGTT
                                                                                                   415 TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATT
                                                                                                                                                                                                                                                                     355 CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATTTCTGCCT
                                                                                                                                                                                                                                                                                                                                   248 ACTICITICCCTICIGCITCATGIGIACTACAAAATAGICATIGCAIGCAAIGGIGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTCATTATTTTGTCCACAGGCGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     175 CCTTCATTATTTTGTCCACAGGCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGAACT
                                                                                                                                                                                                    JOS-992-004-1)

Sequence 1, Application US/09992600A

Publication No. US20030027161A1

GENERAL INFORMATION:

APPLICANT: Benjanin, Stephane

APPLICANT: Branka, Hiroaki

ITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF

FILE REFERENCE: 91.044.DIV

CURRENT APPLICATION NUMBER: US/09/992,600A

CURRENT FILING DATE: 2001-11-13

PRIOR APPLICATION NUMBER: US 09/924,340

PRIOR PLING DATE: 2001-08-06

PRIOR PLING DATE: 2001-08-06

PRIOR PLING DATE: 2001-08-06

PRIOR PLING DATE: 2001-07-13

PRIOR APPLICATION NUMBER: US 60/305,456

PRIOR APPLICATION NUMBER: US 60/296,698

PRIOR PLING DATE: 2001-06-29

PRIOR APPLICATION NUMBER: US 60/296,698

PRIOR PLING DATE: 2001-06-15

PRIOR PLING DATE: 2001-06-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: CDS
LOCATION: 1435..1836
FEATURE:
NAME/KEY: 3'UTR
```

```
NAME/KEY: 5'UTR
LOCATION: 1..143
NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-992-095B-1/c
                                                                                                             US-09-924-340-1
                                                                                                                                                                                                133
                                                                                                                                                                                                                                                                                   1832
                                                                                                                                                                                                                                                                                                                                                                                      1652
                                                                                                                                                                                                                                 193
                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                                                                                                                   1772
                                                                                                                                                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                                                                       493
                                                                                                                                                                                                                                                                                                                                                                                                                                        553
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1532
                                                                                                                                                                           임
                                                                                                                                                                                              ò
                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                               ઠ
                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                      AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGGTCC 1533
                                                                                                                                                                                                                                                                 1772 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                           1652 TCCATGAGTACTCTCAGGTCCTTCTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 1593
                                                                                                            73 TATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCT 132
                                                                                                                                                                                                                ATTAGGGAAAAGGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 372
                                                                                                                                                                              AGCGACCCTTTGGGACAACTCTTATCAGGAGGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                                                                                                                                                                                                   ATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 432
                                                                                                                                                                                                                                                                                                                   TCCATGAGTACTCTCAGGTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 492
                                                                                                                                                                                                                                                                                                                                                     AAIGIAAACAICAIGGIITCCAIGGCGIGIICCAITIGAGAIGGCAITIIGGIGGICC 552
                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                553 GTTGAAGCCTTGGCCGAGGCGCGGGGGCGCTGGGCGAGCTGGGCGAGCT 602
                                                                          Length 2016;
                                                                                             ô
                                                                          40.5%; Score 485.2; DB 10; Length
94.7%; Pred. No. 1.4e-132;
ive 0; Mismatches 28; Indels
                                                                        Query Match
Best Local Similarity 94.7
Matches 502; Conservative
               NAME/KEY: polyA_signal
LOCATION: 1965..1970
FEATURE:
LOCATION: 1837..2016
FEATURE:
                                       ; NAME/KEY: polyA site
; LOCATION: 2001..2016
US-09-992-600A-1
                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 22
US-09-924-340-1/c
                                                                                                                                                                                              1892
                                                                                                                                                                              193
                                                                                                                                                                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                     1592
                                                                                                                                                                                                                253
                                                                                                                                                                                                                                                                                                                                                    493
                                                                                                                                                                                                                                                                                  373
                                                                                                                                                                                                                                                                                                                   433
                                                                                                                           g
                                                                                                                                                         8
                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                            ઠે
                                                                                                                                                                        ઠે
                                                                                                                                                                                                               δ
                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                           ∂
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                g
```

```
1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGGGGCAGATTCCTTA 1893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1892 AGCGACCCTTTGGGACACTCTTATCAGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rccardadracrcrcadgrccrcrrrrrrangradccrrrarccccadgarrrerda 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1592 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGGCC 1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTAGGGAAAAGGAAGCTCTGGAAGCCCACTTTGCCATCTCTAACACTGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         373 ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCGACCCTTTGGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTTGAAGCCTTGGCCGAGGCGCGGCGGACCCTGGGCGAGCTGGGCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/09992095B
; Publication No. US20030157485A1
; GENERAL INFORMATION:
APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
FILE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US.DIV
CURRENT APPLICATION NUMBER: US/09/992,095B
CURRENT APPLICATION NUMBER: US 09/924,340
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR PILING DATE: 2001-08-06
PRIOR PLING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR PLING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 09/926,3456
PRIOR PLING DATE: 2001-08-06
PRIOR PLING DATE: 2001-08-06
                                                                                                                                                                                                                                                                                                                                                                  Length 2016;
                                                                                                                                                                                                                                                                                                                                                                                                                 Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATTTAACTTTTCTTTCTCTCCTTGTCAAATGAGAGTTAGATTTTAT
                                                                                                                                                                                                                                                                                                                                                             Score 485.2; DB 10;
Pred. No. 1.4e-132;
0; Mismatches 28;
                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 94.7%;
Matches 502; Conservative
                                                                                                                     LOCATION: 1435..1836
NAME/KEY: 3'UTR
LOCATION: 1837..2016
NAME/KEY: polyA_signal
LOCATION: 1965..1970
NAME/KEY: polyA_site
LOCATION: 2001..2016
Homo sapiens
                                                   1..1434
CDS
```

```
1772 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      73 TATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACATTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTATTTTGTCCACAGGCGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                GENERAL INCORRANT Stephane

APPLICANT: Benjanin, Stephane

APPLICANT: Tanaka, Hiroaki

TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF

FILE REFERENCE: G.091USOBDIV

CURRENT APPLICATION NUMBER: US 09/924,340

PRIOR PILING DATE: 2001-06-06

PRIOR FILING DATE: 2001-08-06

PRIOR PLILING DATE: 2001-08-06

PRIOR PLILING DATE: 2001-08-06

PRIOR PLILING DATE: 2001-08-06

PRIOR PLILING DATE: 2001-07-13

PRIOR PLILING DATE: 2001-07-13

PRIOR PLILING DATE: 2001-06-29

PRIOR PLILING DATE: 2001-06-29

PRIOR FILING DATE: 2001-06-15

PRIOR FILING DATE: 2001-06-15

PRIOR FILING DATE: 2001-06-25

NUMBER OF SEQ ID NOS: 112

SEQ ID NO 1

FENDATH: DATE: 100-105-25

NUMBER OF SEQ ID NOS: 112

FENDATH: DATE: 100-105-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
40.5%; Score 485.2; DB 10; Length 2016;
Best Local Similarity 94.7%; Pred: No. 1.4e-132;
Matches 502; Conservative 0; Mismatches 28; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: CDS
LOCATION: 1435..1836
FBATURE:
NAME/KEY: 3'UTR
LOCATION: 1837..2016
FBATURE:
NAME/KEY: polyA_signal
LOCATION: 1965..1970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , NAME/KEY: polyA site
, LOCATION: 2001...2016
US-09-999-570-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: 5'UTR
LOCATION: 1..1434
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1772 ATTAGGGAAAAGGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGCCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1712 ATTATTTTGTCCACAGCCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITCCCTICTGCTTCATGTGTACTACAAATAGTCATTGCATGCAATGGTGAGGCCCGCA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       133 AAGTGTCCTGATCTCTTGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       193 AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73 TATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGGTTAGATTTTAATTTTACATTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTGAAGCCTTGGCCGAGGCGCGCGGGGACGCTGGGCGAGCTGGGCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 2016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 40.5%; Score 485.2; DB 10; Length Best Local Similarity 94.7%; Pred. No. 1.4e-132; Matches 502; Conservative 0; Mismatches 28; Indels
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-06-15
PRIOR PILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-05-25
NUMBER OF SEQ ID NOS: 112
SOFTWARE: JPACENT
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: 3'UTR
LOCATION: 1837..2016
FEATURE:
NAME/KEY: POLYA_Signal
LOCATION: 1965..1970
FEATURE:
                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; NAME/KEY: polyA_site
; LOCATION: 2001..2016
US-09-992-095B-1
                                                                                                                                                                                                                                                                                                                                                      LOCATION: 1435..1836
FEATURE:
                                                                                                                                                                                                                                                                    NAME/KEY: 5'UTR
LOCATION: 1..1434
                                                                                                                                                                                                                                                                                        LOCATION: 1..1
FEATURE:
NAME/KEY: CDS
                                                                                                                                                                                       LENGTH: 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       433
```

a

ò

g

ò

8 8

8 8 8 8

1893

252

TCCATGAGTACTCTCAGGTCCTCCTTGTTAAGTAGCCTTTATCCCCAGGGAATTTGTGA 492

433

RESULT 24 US-09-999-570-1/c ; Sequence 1, Application US/0999570

ठे हे ठ

g

ď ò

ò

432

192

ö

1653

492

```
TTTTTTTTTTTTTTCTCTCCCTGCTAAATGAGAGTTAGATTTTATTTTTACATTTGCT 1953
                                                                                                                                                                                                                                                                                                                                                                        1652 TCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1592 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC 1533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATTTAACTTTTCTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCT 132
                                                                                                                                                                                               1712 ATTATTTTGCCAGGGCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                 1772 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                               433 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
       313 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                     373 ATTATTTTGCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                             493 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGGGCATTTTGGTGTGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/1000986

Publication No. US20030096247A1

GENERAL INFORMATION:

APPLICANT: Benjania, Biroaki

TILE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF

FILE REFERENCE: 91.US9.UNBER: US/10/000,986

CURRENT APPLICATION HUMBER: US/10/000,986

CURRENT FILING DATE: 2001-11-14

PRIOR PLING DATE: 2001-08-06

PRIOR PLING DATE: 2001-08-06

PRIOR FILING DATE: 2001-08-06

PRIOR PLING DATE: 2001-06-29

PRIOR PLING DATE: 2001-06-25

NUMBER OF SEQ ID NOS: 112

SOPTWARE: JPACHT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40.5%; Score 485.2; DB 14; Length 2016; llarity 94.7%; Pred. No. 1.4e-132; Conservative 0; Mismatches 28; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTGAAGCCTTGGCCGAGGCGCGCGGGGACGCTGGGCGAGCTGGGCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
LOCATION:
LOCATIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 502; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-000-986-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                             g
                                                                                                                                                 8
                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                        ે
                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                               1652 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2012 Triritriririticiriciciecirercaaargagagriragarrirarriracarriecr 1953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1892 AGGGACCCTTTGGGACACTCTTATCAGGGAGGAGCGAACTGCTCTTTTCTGCCTACTTC 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1952 AAGTGTCCTGATCTCGTCAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 1893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73 TATTTAACTTTTCTTTCTTTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCT 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCGACCCTTTGGGACAACTCTTATCAGGGAGGGAACTGCTCATTTCTGCCTACTTC 252
                                                                        493 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                       1532 GrigaAgccaccagaggcrcagrgcgaggrcrcggcaggaagaaaggi 1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Tanaka, Hitoaki,
APPLICANT: Tanaka, Hitoaki,
ITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US6.DIV
CURRENT APPLICATION NUMBER: US/10/000,489
CURRENT FILING DATE: 2001-11-14
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-06-13
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-13
PRIOR PLING DATE: 2001-06-15
                                                                                                                                                                                                                          GTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 14; Length 2016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 485.2; DB 14;
Pred. No. 1.4e-132;
0; Mismatches 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/10000489
Publication No. US20030092011A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tch 40.5%; al Similarity 94.7%; 502; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Benjanin, Stephane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | NAME/KEY: 5'UTR
| LOCATION: 1..1434
| NAME/KEY: CDS
| LOCATION: 1435..1836
| LOCATION: 1835..1836
| LOCATION: 1837..2016
| NAME/KEY: POLYA Signal
| LOCATION: 1965..1970
| NAME/KEY: POLYA Site
| LOCATION: 2001..2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 25
US-10-000-489-1/c
                                                                                                                                                                                                                      553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                  g
                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 કે
                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
```

ö

```
1953
                                                                                                                                                                                                                                                                                                                                                                                                                             1833
                                                                                                                                                                                                                                                                                                                       1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA 1893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1772 ATTAGGGAAAAGAAGCTCTGGAAAGCCCTCTTTGCCATCTCTACACTGGTCCAGGCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1652 TCCATGAGTACTCTCTCGCTCTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1592 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC 1533
                                                                                                                                                                                                                                                                   192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                432
                                                                                                                                                                                           2012 TTTTTTTTTTTTTTTTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTTACATTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1712 ATTATTTGCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCTTT
                                                                                                                                                                                                                                                                   133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                             1892 AGGGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                373 ATTAITITGICCACAGGCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC
                                                                                                                                                                                                                                                                                                                                                                           <u> AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGGAACTGCTCATTTCTGCCTACTTC</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1532 Grrcaageccaccagagecrcagrccgagercrcgccagcaagaaaaggr 1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1, Application US/10001142
; Sequence 1, Application US/10001142
; Publication No. US20030198954A1
; GENERAL INFORMATION:
    APPLICANT: Benjamin, Stephane
    APPLICANT: Tanaka, Hiroaki
    TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
    FILE REFERENCE: 91.037.DIV
    CURRENT APPLICATION WUMBER: US/10/001,142
    CURRENT FILING DATE: 2001-11-14
    PRIOR PEDITORION NUMBER: PCT/IB01/01715
    PRIOR PELING DATE: 2001-08-06
    PRIOR PLING DATE: 2001-08-06
    PRIOR PLING DATE: 2001-08-06
    PRIOR PLING DATE: 2001-08-06
    PRIOR PLING DATE: 2010-08-06
    PRIOR PLING DATE: 2010-08-1
    PRIOR PLING DATE: 2010-08-10
                                                 Score 485.2; DB 16; Length 2016;
Pred. No. 1.4e-132;
0; Mismatches 28; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Grigaagccringgccgaggcgcgaggcgcriggcgagcraggcg 602
                                                                                                                                                             73 TATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTT
                                                 40.5%;
nilarity 94.7%;
Conservative 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
FRATURE:
NAME/KEY: 5'UTR
LOCATION: 1..1434
NAME/KEY: CDS
LOCATION: 1435..1836
NAME/KEY: 3'UTR
LOCATION: 1837..2016
                                                    Query Match
Best Local Similarity
Matches 502; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-001-142-1/C
  US-10-154-678-1
                                                                                                                                                                                                                                                                                                                                                                           193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     553
                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1592 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTC 1533
                                                                                                                                                                                        1832 TITCCCTICTGCTICATGTGTACTACAAAAIAGTCATTGCATGCATGGAGGGCCCGCA 1773
                                                                                                                                                                                                                                                                                                                    1772 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                          1712 ATTATTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1652 rccargagracrcrcaggrecrccrrrgrraagragccrrrarccccagcgaarrrgrga 1593
1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGAAGTTCCTTA 1893
                                                    AGGACCCTTTGGGACACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                                                                                                                                                                                                                                                                                           ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 492
                                                                                     1892 AGCGACCCTTTGGGACCACTCTTATCAGGGAGGGAGCGAACTGCTCTTTTCTGCCTACTTC
                                                                                                                                                             TITCCCTICTGCTICATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/10154678

Sequence 1, Application US/10154678

Publication No. US20030162186A1

GENERAL INFORMATION:

APPLICANT: Benjanin: Stephane

APPLICANT: Tanaka, Hiroaki

TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF

FILE REFERENCE: 182.US1.REG

CURRENT APPLICATION NUMBER: US/10/154,678

CURRENT APPLICATION NUMBER: US 09/924,340

PRIOR FILING DATE: 2001-00-06

PRIOR FILING DATE: 2001-00-06

PRIOR FILING DATE: 2001-00-17

PRIOR APPLICATION NUMBER: US 60/302,277

PRIOR FILING DATE: 2001-00-13

PRIOR PELING DATE: 2001-06-15

PRIOR FILING DATE: 2001-06-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTGAAGCCTTGGCCGAGGCGCGCGCAGCTGGGCGAGCTGGGCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
1435..1836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1837..2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   polyA_site
2001..2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY: 5'UTR
LOCATION: 1..1434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 27
US-10-154-678-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 1
LENGTH: 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
LOCATION:
                                                                                                                                                             253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
LOCATION:
                                                    193
                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                                                                           373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                               8 6 8 6
8 6 8 6
                                                                                             8
                                                                                                                                    <u>ک</u> ۾
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 6
                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
AGCGACCCTTTGGGACAACTCTTATCAGGAGGAGGGAACTGCTCATTTCTGCCTACTTC 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTAGGGAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1712 ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGGGAATTTGTGA 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 46392, Application US/10242535A
Publication No. US2004001363A1
GENERAL INFORMATION:
APPLICANT: ChondroGene Inc.
TITLE OF INVENTION: Compositions and Methods Relatiing to Osteoarthritis
FILE REFERENCE: 4231/2005
CURRENT APPLICATION NUMBER: US/10/242,535A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2012 TTTTTTTTTTTTTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             193 AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTATTTTGCACAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GITGAAGCCITGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                      Length 2016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | TATTTAACTTTTCTTTCTGCTTGTCAAATGAGAGTTAGATTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indela
                                                                                                                                                                                                                                                                                                                                                                                                                  Score 485.2; DB 21;
Pred. No. 1.4e-132;
O; Mismatches 28;
                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 94.7%;
Matches 502; Conservative
                                                                                                                                                     FEATURE:
NAME/KEY: CDS
LOCATION: 1435..1836
FEATURE:
NAME/KEY: 3'TJR
LOCATION: 1837..2016
FEATURE:
NAME/KEY: polya_signal
LOCATION: 1965..1970
FEATURE:
NAME/KEY: polya_site
LOCATION: 2001..2016
US-10-838-854-1
                                                                             ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-242-535A-46392/c
     SOFTWARE: JPatent
SEQ ID NO 1
LENGTH: 2016
TYPE: DNA
                                                                                                                                     LOCATION: 1..1434
FEATURE:
                                                                                                                  NAME/KEY: 5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                1892 AGGGACCCTTTGGGACACTCTTATCAGGAGAGGAGCGAACTGCTCCTTTCTGCCTACTTC 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1652 TCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                 2012 TTTTTTTTTTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACATTTGCT 1953
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1832 Tricccrrcrcrrcrargraracracaaaragrcarrccargcaargeraggecceeca 1773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1772 ATTAGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1952 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA 1893
                                                                                                                                                                                         132
                                                                                                                                                                                                                                                                 133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA 192
                                                                                                                                                                                                                                                                                                                                           AGCGACCTTTGGGACAACTCTTATCAGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                                                                                                                                                                                                                                                                                                                                  313 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  373 ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC 552
                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.065.DIV
CURRENT PILING DATE: 2004-05-03
FRIOR PILING DATE: 2001-11-14
PRIOR PILING DATE: 2001-11-14
PRIOR PILING DATE: 2001-11-14
PRIOR PILING DATE: 2001-10-16
PRIOR PILING DATE: 2001-06-06
PRIOR PELING DATE: 2001-08-06
PRIOR PILING DATE: 2001-06-15
PRIOR PILING DATE: 2001-06-29
PRIOR PILING DATE: 2001-06-25
PRIOR PELING DATE: 2001-06-25
PRIOR PILING DATE: 2001-06-25
PRIOR PILING DATE: 2001-06-25
PRIOR PILING DATE: 2001-06-25
PRIOR FILING DATE: 2001-06-25
PRIOR FILING DATE: 2001-05-25
NUMBER OF SEQ ID NOS: 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 2016;
                                                                                                                                                         ö
                                                                                                                                                     Indels
                                                                                                                    DB 16;
                                                                                                                40.5%; Score 485.2; DB 16
llarity 94.7%; Pred. No. 1.4e-132;
Conservative 0; Mismatches 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/10838854
Publication No. US20050026182A1
GENERAL INFORMATION:
; NAME/KEY: polyA_signal
; LOCATION: 1965..1970
; NAME/KEY: polyA_site
; LOCATION: 2001..2016
US-10-001-142-1
                                                                                                                                 Best Local Similarity
Matches 502; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-838-854-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             553
                                                                                                                                                                                                                                                                                                                                           193
                                                                                                                                                                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1532
                                                                                                                  Query Match
                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
```

Gapa

ö

192

252

432

```
Query Match 38.5%;
Best Local Similarity 98.7%;
Matches 465; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-242-535A-57930/c
SEQ ID NO 46392
LENGTH: 482
TYPE: DNA
ORGANISM: Human
                                                                              US-10-085-783A-46392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-242-535A-57930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-085-783A-46392/c

Sequence 46392, Application US/10085783A

Publication No. US20040037841A1

GENERAL INFORMATION:
APPLICANT: ChondroGene Inc.
APPLICANT: Liew, C. C.
TITLE OF INVERTION: Compositions and Methods Relating to Osteoarthritis
FILE REFERENCE: 4231/2002

CURRENT APPLICATION NUMBER: US/10/085,783A

CURRENT APPLICATION NUMBER: US 60/305,340

PRIOR APPLICATION NUMBER: US 60/275,017

PRIOR PILING DATE: 2001-07-13

PRIOR FILING DATE: 2001-03-12

PRIOR PILING DATE: 2001-03-12

PRIOR FILING DATE: 2001-03-12

PRIOR FILING DATE: 2001-03-12

PRIOR FILING DATE: 2001-03-12

PRIOR FILING DATE: 2001-03-12

WHUBER: OF SEQ ID NOS: 58994

SOFTWARE: PatentIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              478 GAACTTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGGTGCAAACAATACAAAATCAA 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITACATTIGCTAAGIGICCTGATCTGCTCATGAAATCCTTCTAIGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGATICCTTAAGCGACCCTTIGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAIT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCC 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGGACCAACTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                  Length 482;
                                                                                                                                                                                                                                                                                                                                                                        4; Indels
                                                                                                                                                                                                                                                                                                                                  DB 17;
                                                                                                                                                                                                                                                                                                                                Score 471.6; DB 17
Pred. No. 7.3e-129;
0; Mismatches 4;
                PRIOR APPLICATION NUMBER: US 10/085,783
PRIOR FILING DATE: 2002-02-28
PRIOR FILING DATE: 2002-02-28
PRIOR FILING DATE: 2001-07-13
PRIOR PELING DATE: 2001-03-12
PRIOR FILING DATE: 2001-03-12
PRIOR PILING DATE: 2001-03-12
PRIOR PILING DATE: 2001-03-28
NUMBER OF SEQ ID NOS: 58994
SOFTWARE: Patentin Version 3.2
LENGTH: 482
    2002-09-12
                                                                                                                                                                                                                                                                                                                                  39.3%;
                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 474; Conserv
CURRENT FILING DATE:
                                                                                                                                                                                                                                                      ; TYPE: DNA
; ORGANISM: Human
US-10-242-535A-46392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
```

g

ò g ò

염 ò g ò g

8 g ò g ò

```
USERIAL INFORMATION:

SEQUENCE 57930, Application US/10242535A

Publication No. US20040013663A1

GENERAL INFORMATION:

APPLICANT: ChondroGene Inc.

APPLICANT: ChondroGene Inc.

TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis

FILE REFERENCE: 4231/2005

CURRENT APPLICATION NUMBER: US/10/242,535A

CURRENT FILING DATE: 2002-09-12

PRIOR PELLING DATE: 2002-09-12

PRIOR PELLING DATE: 2001-07-13

PRIOR APPLICATION NUMBER: US 60/275,017

PRIOR PILING DATE: 2001-07-13

PRIOR FILING DATE: 2001-07-13

PRIOR FILING DATE: 2001-03-12

PRIOR FILING DATE: 2001-03-12

PRIOR SPLING DATE: 2001-03-12

PRIOR FILING DATE: 2001-03-12

SPRIOR PELLOR NUMBER: US 60/275,017

PRIOR FILING DATE: 2001-03-28

NUMBER OF SEQ ID NOS: 58994

SOFTWARE: PATENTIN VERSION 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                           ö
                                                                                                                                                                         419
                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                       359
                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                        299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GEGAGGCCCGCAATTAGGGAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 118 rccaggrccrrcarrarrrrgrccacaggccagaggrcrrrrrgarrrccaaaaarcca 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            478
                                                                                                                                                                                                                                                                                                                                                                                                  358 TTTACATTTGCTAAGTGTCTCCTGATCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               298 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                         478 GAACTTAAAAAAGGAACTTTATTTATTGAGGGCAAGGGGGTGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                          418 AAGCTTATCTGGTATTTAACTTTTCTTTCTGCTTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                TITACATITIGCIAAGIGICCIGAICIGCICAIGAAAICCITCIAIGGGGAAGCIGIGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               58 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCC 1
                                                                                                                    1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                  AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCC
                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 461.4; DB 17; Length 472;
Pred. No. 7.6e-126;
0; Mismatches 6; Indels 0;
  DB 18; Length 482;
                                                           Indels
                                                              4;
Score 471.6; DB 18
Pred. No. 7.3e-129;
0; Mismatches 4;
Query Match
Best Local Similarity 99.2%;
Matches 474; Conservative (
```

a ઠે g ò 9

ò

ያ ያ

ઠ

셤

셤

ò

ઠ

쉽

ઠે a ò

```
Sequence 49122, Application US/10242535A
Fublication No. US20040013653A1
GENERAL INFORMATION:
TELEMAL INFORMATION:
TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
FILE REPERBNCE: 4231/2005
CURRENT FILING DATE: 2002-09-12
FRICH APPLICATION NUMBER: US/10/242,535A
CURRENT FILING DATE: 2002-09-12
FRICH APPLICATION NUMBER: US 60/305,783
FRICH REPERBNCE: 2001-07-13
FRICH APPLICATION NUMBER: US 60/305,340
FRICH APPLICATION NUMBER: US 60/275,017
FRICH APPLICATION NUMBER: US 60/275,017
FRICH APPLICATION NUMBER: US 60/275,017
FRICH RILING DATE: 2001-03-12
FRICH RILING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 58994
SOFTWARE: Patentin Version 3.2
LENGTH: 480
                                             312
                                                                                     233
                                                                                                                           372
                                                                                                                                                    232 ATTAGGGAAAAGACCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 173
                                                                                                                                                                                                               373 ATTATTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          182
                                                                                                                                                                                                                                        GTTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                242
352 AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 293
                                                                                                                                                                                                                                                                                                    TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGATTCCTTAAGCCGACCCTTTGGGCAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 241
                                                                                                                                                                                                                                                                                                                                               rccargagracrcrcaggrccrcrrrgrraagragccrrrarccccagcgaarrrgrga 53
                                                                 292 TITCCCTTCTGCTTCATGTGTACTACAAAATAGTCATGCAATGCAATGGTGAGGCCCGCA
                                                                                                                           313 ATTAGGGAAAAGACTCTGGAAGCCCACTTTGCCATCTTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              63 GCTTATCTGGGTATTTAACTTTTCTTTGTCTTGTCAAATGAGAGTTAGATTTTATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360 TACATITIGCIAAGIGICCTGATCIGCICAIGAAATCCTICTAIGGGGGAAGCIGIGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 AACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420 GCTTATCTGGTATTTAACTTTTCTTTCCTCTGCTTGCAAATGAGAGTTAGATTTTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 493 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                 Length 480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 37.4%; Score 448; DB 17;
Best Local Similarity 95.8%; Pred. No. 7.2e-122;
Matches 460; Conservative 0; Mismatches 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-242-535A-49122/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Human
US-10-242-535A-49122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                          253
                                                                                                                                                                                                                                                       172
                                                                                                                                                                                                                                                                                                    433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              183
                           ઠે
                                                                        음상
                                                                                                                                                         용
                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                ठे
                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 57930, Application US/10085783A; Bublication No. US/20040037841A1; Sequence 57930, Application No. US/20040037841A1; GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Chondrodene Inc.; APPLICANT: Chondrodene Inc.; APPLICANT: Chondrodene Inc.; APPLICANT: Chondrodene Inc.; APPLICANT: Liew, C.C.; TITLE OF INVENTION: Compositions and Methods Relatiing to Osteoarthritis FILER REFERENCE: 4231/2002
CURRENT APPLICATION NUMBER: US/10/085,783A; CURRENT APPLICATION NUMBER: US 60/205,340; PRIOR PILING DATE: 2001-07-13; PRIOR APPLICATION NUMBER: US 60/275,017; PRIOR PILING DATE: 2001-02-28; NUMBER OF SEQ ID NOS: 58994; SOFTWARE: PatentIn version 3.2; SEQ ID NOS: 58994; SOFTWARE: PatentIn version 3.2
                  292 TITCCCTICTGCTICATGTGTACTACAAAAIAGTCAITGCAIGCAAIGGTGAGGCCCGCA 233
                                                                                                                                                                                                                                                                                                                                                               ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                  373 ATTATTTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTATTTTGTCCACAGCCAGAGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 113
                                                                                                     AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 192
                                                                                                                                           412 AAGTGTCCTGATCTCTATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 353
                                                                                                                                                                                      AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                                                                                                                                                                                         TITCCCTICTGCTTCATGTGTACTACAAATAGTCATTGCATGCAATGGTGAGGCCCGCA 312
                                                                                                                                                                                                                                                                                                                                                                                        TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCAGCGAATTTGTGA 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTA 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGGACCCTTTGGGACAACTCTTATCAGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ratritaaciriticriticricicriscristaarisasatrasaritraritriacaritiscr 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                133 AAGTGTCCTGATCTCCTTGAAATCCTTCTATGGGGGAAGCTGGGGGCAGATTCCTTA 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCATGAGTACTCTCAGGTCCTCCTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73 TATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACATTTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATGIAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGAGGCATTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 461.4; DB 18
Pred. No. 7.6e-126;
0; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    38.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 465; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-085-783A-57930/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-085-783A-57930
                                                                                                                                                                                        193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       472
                                                                                                   133
                                                                                                                                                                                                                                                                            253
                                                                                                                                                                                                                                                                                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        412
```

```
Sequence 56036, Application US/10242535A
; Bublication No. US20040013663A1
; Bublication No. US20040013663A1
; GENERAL INFORMATION:
; APPLICANT: ChondroGene Inc.
; APPLICANT: ChondroGene Inc.
; APPLICANT: Compositions and Methods Relating to Osteoarthritis
rITIES OF INVENTY OF COMPOSITIONS COMPOSITIONS
; CURRENT APPLICATION NUMBER: US/10/242,535A
; CURRENT FILING DATE: 2002-09-12
; PRIOR APPLICATION NUMBER: US 60/305,783
; PRIOR PELING DATE: 2001-07-13
; PRIOR FILING DATE: 2001-03-12
; RIGHTH APPLICATION NUMBER: US 60/275,017
; PRIOR FILING DATE: 2001-03-12
; RIGHTH APPLICATION NUMBER: US 60/271,955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         414 TCTGGTATTTTAACTTTTTCTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATTTTACAT 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60 GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTTCCCCAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             474 AAAAGAACTITATITATITGAGGGCAAGGGGGATGCAAACNACCNCAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               354 TIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTICITICCTICIGCTICATGIGATACTACAAAATAGICATIGCATGCAATGGIGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      174 CCGCAATTAGGAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  114 CCTTCATTATTTTGTCCACAGGCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      68 ICTGGTATTTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTTATTTTACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATTTCTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9 AAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAAT-ACAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTTTTCCATCAGTACTCTCAGGTCC-TCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
37.2%; Score 446.4; DB 17; Length 474;
Best Local Similarity 98.9%; Pred. No. 2.1e-121;
Matches 469; Conservative 0; Mismatches 3; Indels 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ο
σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc feature

LOCATION: (432)

OTHER INFORMATION: n is a, c, r

FRATURE:

NAME/KEY: misc feature

LOCATION: (435)..(436)

GOTHER INFORMATION: n is a, c, us. 10-242-535A-56036
                                                                                US-10-242-535A-56036/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Human
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       54
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Liew, C.C.
TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
FILE REPERENCE: 4231/2002
CURRENT APPLICATION NUMBER: US/10/085,783A
CURRENT FILING DATE: 2002-02-8
FRIOR APPLICATION NUMBER: US 60/305,340
FRIOR FILING DATE: 2001-07-13
FRIOR APPLICATION NUMBER: US 60/275,017
FRIOR APPLICATION NUMBER: US 60/271,955
FRIOR APPLICATION NUMBER: US 60/271,955
FRIOR PILING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 58994
SOFTWARE: Patentin version 3.2
SEQ ID NO 49122
LENGTH: 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480 ACCTAAAAAAGACCTTTATTTATTGAGGGCAAGGGGATGCAACCAATCCAAAAAA 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                       422
                                                                                                                                                                                     GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTTATCTGGTATTTAACTTTTCTTTCTTGCTTGTCAAATGAGAGTTAGATTTTTATTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACATTIGCTAAGIGICCTGATCTGCTCAIGAAATCCTTCTATGGGGGAAGCTGTGGGGG 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGGICCTICATIAITITGICCACAGCCAGAGGGICTITITGATITICCAAAAAICCAGG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        receraerrerrecerreserreseraciaesaaaaaraereargeaareer 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGGCCCCCAATTAGGGAAAACAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC 121
                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            caggiccricaritaritigiccacaggegagggicriringariticaaaaarccagg 61
                                                                                                                                                                                                                            н
                                                                                                                          CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                           GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTGTTAAGTAGCTTTTTTCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGATTCCTTAAGCGACCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3 AACTAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 448; DB 18;
Pred. No. 7.2e-122;
0; Mismatches 20;
                                                                                                                                                                                                                                                                                        RESULT 35
US-10-085-783A-49122/c
; Sequence 49122, Application US/10085783A
; Publication No. US20040037841A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       37.4%;
ilarity 95.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: ChondroGene Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 460; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-085-783A-49122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Human
                                                                                                    363
                                                                                                                                                                                     423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                        180
                                                                                                                                            120
                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      123
                                                      g
                                                                                                  8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 & B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 &
                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8 8
```

'n

5

415

127

295 247 235 175

115

427 S

```
ORGANISM: Human
                                                                                                                                                                                                                                                              SEQ ID NO 56504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28
                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                    APELICANT: Lisew, C.C.
TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
FILE REPERENCE: 4231/2002
CURRENT APPLICATION NUMBER: US/10/085,783A
CURRENT FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: US 60/305,340
PRIOR APPLICATION NUMBER: US 60/275,017
PRIOR FILING DATE: 2001-03-13
PRIOR FILING DATE: 2001-03-16
PRIOR FILING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 58994
SOFTWARE: Patentin version 3.2
LENGTH: 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTGGTATTTAACTTTTCTTTTCTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACAT 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TIGCTAAGTGTCCTGATCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  354 Trgcraagrercergarcrecreargaaarcerrerarggggaagergregggarr 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccecaattagggaaaagatctggaagcccactttgccarctctacactggtccaggt 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT 427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rcregraritaacriritcriricregerigicaarigagagriagarrirarriracar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATTTCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTICITICCCTICIGCTICATGIGTACTACAAATAGTCATTGCATGCAATGGTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    114 CCTTCATTATTTTGTCCACAGGCGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9 AAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAAT-ACAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTTTTCCATGAGTACTCTCAGGTCC-TCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTTTTCCATGAGTACTCTCAGGTCCTTTCTTTGTTAAGTAGCCTTTATCCCCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                37.2%; Score 446.4; DB 18; Length 474; 98.9%; Pred. No. 2.1e-121; tive 0; Mismatches 3; Indels 2;
              Sequence 56036, Application US/10085783A Publication No. US2040037841A1 GENERAL INFORMATION:
APPLICANT: ChondroGene Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ຫ້
                                                                                                                                                                                                                                                                                                                                                                                           ģ
                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAMEKEY: misc feature
LOCATION: (436)...(436)
OTHER INFORMATION: n is a, c,
US-10-085-783A-56036
                                                                                                                                                                                                                                                                                                                                                                                           ΰ
                                                                                                                                                                                                                                                                                                                                        FEATURE: misc feature LOCATION: (432)..(432) OTHER INFORMATION: n is a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               al Similarity 98.5
469; Conservative
US-10-085-783A-56036/c
                                                                                                                                                                                                                                                                                                                           ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠ
```

```
APPLICANT: ChondroGene Inc.
APPLICANT: ChondroGene Inc.
APPLICANT: Liew, C.C.
TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
ITLE REFERENCE: 4231/2005
CURRENT APPLICATION NUMBER: US/10/242,535A
CURRENT FILING DATE: 2002-09-12
PRIOR PRILING DATE: 2002-09-28
PRIOR PLING DATE: 2001-07-13
PRIOR FILING DATE: 2001-07-13
PRIOR PLING DATE: 2001-03-12
PRIOR PLING PAPLICATION NUMBER: US 60/271, 955
PRIOR PLING PAPEL SATION NOWER: DS 60/271, 955
PRIOR PLING PAPEL SATION NOWER: DS 60/271, 955
PRIOR PLING DATE: 2001-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     388 AAAGCTTATCTGGTATTTAACTTTTCTTCTGCCTTGTCAAATGAGAGTTAGATTTTAT 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITIACATITIGCIAAGIGICCIGAICTGCICATGAAAICCTICIAIGGGGGAAGCIGIGG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180 GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             328 TITIACATITGCTAAGIGICCTGAICIGCTCATGAAAICCTICIAIGGGGAAGCTGIGG 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300 GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360 GTCCAGGTCCTTCATTATTTTGTCCACAGGCGGGGTCTTTTTGATTTTCCAAAAATCC 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      148 GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Grecadgrecineariarinarecaeaeaeaeaeaeaeaeareninaarinaearaaaaee 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: ChondroGene Inc.
APPLICANT: Liew, C.C.
TITLE OF INVENTION: Compositions and Methods Relatiing to Osteoarthritis FILE REFERENCE: 4231/2002
CURRENT APPLICATION NUMBER: US/10/085,783A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60 AAAGCTTATCTGGTATTTAACTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGAACTAAAAAAAACTTTATTTATTGAGGGCAAGGGGATGCAAAC-AATACAAAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 17; Length 448;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 434.4; DB 17
Pred. No. 7.5e-118;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420 AGGGAACTCCTTTTCCATGAGTACTCTC 447
Sequence 56504, Application US/10242535A Publication No. US20040013663A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 56504, Application US/10085783A; Publication No. US20040037841A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 99.6%;
Matches 446; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-085-783A-56504/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-242-535A-56504
```

ö

ö

151 418 211 238

391

451 118 511 28

331

```
466 CATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAG 407
                                                                                                                                                                                                                                                                                                              417 TGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAAC 358
                                                                                                                                                                                                                                                                                                                                                                                                    357 retrarcadadadadadadadacrecretraceadarcrecerrecerretradar 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           237 GGAAGCCCACTTTGCCATCTCTACACTCGTCCAGGTCCTTCATTATTTTTGTCCACAGCCA 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         297 GTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               125 CATTIGCTAAGIGICCIGAICTGCTCAIGAAAICCTICTAIGGGGAAGCIGIGGGGCAG
                                                                                                                                                                                                                         477 recrigicaaargagagiragarririarririracarriscraagigiccigarcigcrca
                                                                                                                                                                                                                                                                    152 TGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAAC
                                                                                                                                                                                                                                                                                                                                                              212 TCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       332 GGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            392 GAGGGTCTTTTGATTTTCCAAAAATCCAGGAACTCCTTTCCATGAGTACTCTCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  452 CCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                  272 GTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 10; Length 477;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATE HYSEQ. Inc.
TITLE OF INVENTION: NOVEL NUCLEIC ACID SEQUENCES OBTAINED
TITLE OF INVENTION: FROM VARIOUS CDNA LIBRARIES
FILE REPERENCE: 20411-756
CURRENT FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: US/09/235,076
PRIOR APPLICATION NUMBER: 1999-01-20
NUMBER OF SEQ ID NOS: 38054
SOFTWARE: FESSEE FOR Windows Version 3.0
SEQ ID NO 12556
LENGTH: 466
                                                                                                                                                                                  92 IGCTIGICAAAIGAGAGIIAGAITITIATITITACATITGCIAAGIGICC
                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 35.2%; Score 422; DB 10; L Best Local Similarity 100.0%; Pred. No. 3.6e-114; Matches 422; Conservative 0; Mismatches 0;
                                                                                      Query Match
35.8%; Score 429.4; DB 10
Best Local Similarity 99.8%; Pred. No. 2.3e-116;
Matches 430; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 12556, Application US/09918995; Publication No. US20030073623A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc feature
LOCATION: (1)...(466)
OTHER INFORMATION: n = A,T,C or G

    LOCATION: (1)...(477)
    OTHER INFORMATION: n = A,T,C or G
US-09-918-995-21508

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         512 CCATGGCGTGT 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                57 ccardecercr 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 41
US-09-918-995-12556/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-918-995-12556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTAT 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITIACATITICCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG 269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                448 GGAACTAAAAAAGAACTITTATTTATTGAGGGCAAGGGGATGCAAACAAATACAAAAAATCA 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rrcreccracrrcrrrrcccrrcrecrrcargraracracaaaaragrcarrecaagragaar 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTGAGGCCCGCAATTAGGGGAAAAGATCTCTGGAAGCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCCAGGTCCTTCATTATTTTGTCCACAGAGAGGGTCTTTTTGATTTTCCAAAAATCC 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAGCTTATCTGGTATTTAACTTTTCTTTCTCTGGCTTGTCAAATGAGAGTTAGATTTAT 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                              1 GGAACTAAAAAAAACTTTATTTATTGAGGGCAAGGGGATGCAAAC-AATACAAAATCA
                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                                                         Length 448;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21508, Application US/09918995
; Bedlication No. US20030073623A1
; GENERAL INFORMATION:
; APPLICANT: HYSEQ, Inc.
; TITLE OF INVENTION: FROM VARIOUS CDNA LIBRARIES
; FILE REFERENCE: 20411-78:
; CURRENT APPLICATION NUMBER: US/09/918,995
; CURRENT FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: US/09/235,076
; RICH APPLICATION NUMBER: US/09/235,076
; RICH RELIGATION NUMBER: US/09/235,076
; RICH RELIGATION NUMBER: US/09/235,076
; RICH APPLICATION NUMBER: US/09/235,076
; RICH RELIGATION NUMBER: US/09/235,076
; RICH RELIGATION NUMBER: US/09/235,076
; RICH RELIGATION OF SEQ FOR WINDOWS VERSION 3.0
; SEQ ID NO 21508
                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                       DB 18;
                                                                                                                                                                                                                                                                                                                                       Score 434.4; DB 18
Pred. No. 7.5e-118;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120 AGGGAACTCCTTTTCCATGAGTACTCTC 447
CURRENT FILING DATE: 2002-02-28
PRIOR APPLICATION NUMBER: US 60/305,340
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-03-12
PRIOR FILING DATE: 2001-03-12
PRIOR FILING DATE: 2001-03-28
NUMBER OF SEQ ID NOS: 58994
SOFTWARE: Patentin Version 3.2
LENGTH: 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGGAACTCCTTTTCCATGAGTACTCTC 1
                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 99.6%;
Matches 446; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 40
US-09-918-995-21508/c
                                                                                                                                                                                                                                             ; TYPE: DNA
; ORGANISM: Human
US-10-085-783A-56504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
```

184

0; Gaps

පු

δ g ઠે

d ò g

g

ò

윱

ઠ

ઠ

```
RESULT 43
US-10-106-698-2418/C
is Sequence 2418, Application US/10106698
is Publication No. US2030109690A1
is GENERAL INFORMATION: Colon and Colon Cancer Associated Polymucleotides and Polypeptide
is TITLE OF INVENTION: Colon and Colon Cancer Associated Polymucleotides and Polypeptide
is TITLE OF INVENTION: Colon and Colon Cancer Associated Polymucleotides and Polypeptide
is TITLE OF INVENTION: COLON EXPLOSED
is PRIOR PELING DATE: 2000-03-27
is PRIOR FILING DATE: 2000-09-28
is PRIOR PILING DATE: 1999-11-03
is PRIOR APPLICATION NUMBER: US 60/157,137
is PRIOR APPLICATION NUMBER: US 60/153,280
is PRIOR APPLICATION NUMBER: US 60/163,280
is PRIOR PILING DATE: 1999-11-03
is NUMBER OF SEQ ID NOS: 8564
is SEQ ID NO 2418
in LENGTH: 632
                                          178 rereceraerrerrecerrerecercerereratacracaaarracrerrecargeaare 119
                                                                                         301 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                    361 TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTGATTTTCC 411
                                                                                                                                                                                                              FEATURE:
NAME/KEX: misc_feature
LOCATION: (7).
CTHEN INFORMATION: n equals a,t,g, or c
NAME/KEY: misc_feature
LOCATION: (24)..(24)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc_feature
LOCATION: (40)..(40)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc_feature
LOCATION: (337)..(337)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc_feature
LOCATION: (337)..(337)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc feature
LOCATION: (340)...(340)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc feature
LOCATION: (348)...(348)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc feature
LOCATION: (355)...(355)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc feature
LOCATION: (355)...(355)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc feature
LOCATION: (355)...(359)
OTHER INFORMATION: n equals a,t,g, or c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc feature
LOCATION: (380)
.. (380)
OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc feature
LOCATION: (463).. (463)
OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc_feature
LOCATION: (365)..(366)
OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc_feature
LOCATION: (369)..(369)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: n equals a, t, g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo sapiens
241
                                                                                                                                                                                                                                    28
                                                                                                                              셤
                                                                                                                                                                                     ò
                                                                                                                                                                                                                                  셤
                                В
                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                   226 GGTCCTTCATTATTTTGTCCACAGCGGGGTCTTTTTGATTTTCCAAAAATCCAGGGA 167
                                                                                                                                                                                                                                                                                                                                                                                                           166 ACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGA 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           485 ATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                418 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGTGTAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               358 AAGCTTATCTGGTATTTAACTTTTCTTTCTTCTGCTTGTCAAATGAGAGTTAGATTTATT 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTACATTIGCTAAGIGICCTGATCTGCTCATGAAAICCTICTAIGGGGGAAGCTGIGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             298 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTTCTACACTGGTCCA 364
                                                                                                                                                                                                                                                                                   GGTCCTTCATTATTTTGTCCACAGGCTCTTTTTGATTTTCCAAAAATCCAGGGA 424
                                                                                         ACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTAAGTAGCCTTTTATCCCCAGCGA 484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    106 ATTIGIGAAATGIAAAACATCAIGGTITCCAIGGCGTGTITCAITTGAGAIGGCAITTIGG 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGGATGCAAAAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-997-003-26/c

Sequence 26, Application US/0997003

Publication No. US2030203361A1

GENERAL INFORMATION:
TITLE OF INVENTION:
TITLE OF INVENTION:
CURRENT APPLICATION NUMBER: US/09/997,003

CURRENT FILING DATE: 2001-11-30

PRIOR PULICATION NUMBER: US/09/997,003

PRIOR PELLING DATE: 2001-11-30

PRIOR PELLING DATE: 2001-11-30

PRIOR APPLICATION NUMBER: CT/US00/22157

PRIOR APPLICATION NUMBER: PCT/US00/22157

PRIOR APPLICATION NUMBER: 60/148,680

PRIOR APPLICATION NUMBER: 60/148,680

NUMBER OF SEQ ID NOS: 56

SEQ ID NO 26

LENGTH: 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 10; Length 441;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 34.3%; Score 411; DB 10; L
Best Local Similarity 100.0%; Pred. No. 6.4e-111;
Matches 411; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
US-09-997-003-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TG 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TG 45
                                                                                         245
                                                                                                                                                                                       305
                                                                                                                                                                                                                                       286
                                                                                                                                                                                                                                                                                   365
                                                                                                                                                                                                                                                                                                                                                                                  425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       46
```

g

ઠે

g ઠે g ઠે

ò

```
Sequence 45555, Application US/10085783A; Sequence 45555, Application US/10085783A; Publication No. US20040037841A1; Sequence 45555, Application No. US20040037841A1; GENERAL INFORMATION:

APPLICANT: ChondroGene Inc.; APPLICANT: Compositions and Methods Relating to Osteoarthritis FILE REFERENCE: 4231/2002; TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis; TILE REFERENCE: 4231/2002; CURRENT APPLICATION NUMBER: US/10/085,783A; CURRENT FILING DATE: 2002-02-28; PRIOR APPLICATION NUMBER: US 60/275,017; PRIOR APPLICATION NUMBER: US 60/275,017; PRIOR APPLICATION NUMBER: US 60/275,017; PRIOR PILING DATE: 2001-03-12; PRIOR FILING DATE: 2001-03-12; PRIOR FILING DATE: 2001-03-12; PRIOR FILING DATE: 2001-03-28; SOFTWARE: Patentin version 3.2; SEQ ID NO 45565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         211 GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT 152
                                                                                                                                                                                                                                                                                                                                                                                            391 GAAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGGATGCAAACAATAAAAATCAA 332
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITACATITIGCIAAGIGICCIGATCIGCICATGAAAICCITCIAIGGGGAAGCIGI-GG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        211 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTCGG 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAAAT 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300 GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91 GGTGAGGCCCGCAATTAGGGAAAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTG 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCAT
                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 377.4; DB 18; Length 392;
Pred. No. 5.5e-101;
0; Mismatches 1; Indels 1:
                                                                                                                                                                                                                                                         DB 17; Length 392;
                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                          1;
                                                                                                                                                                                                                                                       31.5%; Score 377.4; DB 17; 99.5%; Pred. No. 5.5e-101; tive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360 GTCCAGGTCCTTCATTATTTTGTCCACAGCC 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/271,955
    PRIOR FILING DATE: 2001-03-12
PRIOR APPLICATION NUMBER: US 60/
PRIOR FILING DATE: 2001-02-28
NUMBER OF SEQ ID NOS: 58994
SOFTWARE: Patentin version 3.2
SEQ ID NO 45565
LENGTH: 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 99.5%;
Matches 389; Conservative
                                                                                                                                                                                                                                                                                                     Matches 389; Conservative
                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 45
US-10-085-783A-45565/c
                                                                                                                                                                                                             US-10-242-535A-45565
                                                                                                                                                                                        ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31
                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 452 AAGCTTATCTGGTATTTAACTTTTTTTTTTTTCTTTCTGCTTGTCAAATGAGGTTAGATTTTATT 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITACATTIGCTNAAGIGTCCCGNITNNGGICCNIAANICCTTINIAIGGGGNAANCIGT 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        512 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAACCAATNCAAAAATCAA 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTACATTTGCT-AAGTGTCCTGAT--CTGCTCATGAAATCCTTCTATGGGGGAAGCTGT 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTC 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               298 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 212 ATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     152 TGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAT 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4556, Application US/10242535A
Publication No. US20040013663A1
GENERAL INFORMATION:
APPLICANT: Chondrogene Inc.
APPLICANT: Liew, C.C.
TITLE OF INVENTION: Compositions and Methods Relating to Osteoarthritis
FILE REFERENCE: 4231/2005
CURRENT PILING DATE: 2002-09-12
PRIOR APPLICATION NUMBER: US/10/242,535A
CURRENT FILING DATE: 2002-09-12
PRIOR FILING DATE: 2002-09-12
PRIOR FILING DATE: 2002-09-13
PRIOR FILING DATE: 2001-09-13
PRIOR FILING DATE: 2001-09-13
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/205,340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGCCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGAGGAGGAACTGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 632;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 396.2; DB 15; Length
Pred. No. 1.9e-106;
0; Mismatches 16; Indels
                                                       or
                                                                                                                                                                                          or
                                                                                                                                                                                                                                                           or
                                                                                                                                                                                                                                                                                                                                                                                              or
DAME/KEY: misc feature
LOCATION: (519)
. OTHER INFORMATION: nequals a,t,g, or
NAME/KEY: misc feature
LOCATION: (577)...(577)
. OTHER INFORMATION: nequals a,t,g, or
NAME/KEY: misc feature
LOCATION: (584)...(584)
. OTHER INFORMATION: nequals a,t,g, or
NAME/KEY: misc feature
LOCATION: (593)...(593)
. OTHER INFORMATION: nequals a,t,g, or
NAME/KEY: misc feature
LOCATION: (595)...(595)
. OTHER INFORMATION: nequals a,t,g, or
. LOCATION: (621)
. OTHER INFORMATION: nequals a,t,g, or
. LOCATION: (621)
. OTHER INFORMATION: nequals a,t,g, or
. UCATION: (621)
. OTHER INFORMATION: nequals a,t,g, or
. US-10-106-698-2418
                                                                                                                      or
                                                                                                                                                                                                                                                                                                                             or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAGGGAACTCCTTTTCCATGAG 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ccasssarccrrrrccarsas 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                             33.0%;
95.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 95.7
Matches 424; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 44
US-10-242-535A-45565/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
```

272

239

ij

Search completed: August 18, 2005, 03:47:45 Job time : 804 secs

This Page Blank (uspto)

```
August 17, 2005, 22:33:12; Search time 5198 Seconds (without alignments) 11176.953 Million cell updates/sec
                                                                                                                                                                                          1 ggaactaaaaaagaacttta......cgggcttcccgcccaccgg 1199
                                                                                                                                                                                                                                                                                                       9416466
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                     4708233 seqs, 24227607955 residues
                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                          OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                       IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                     Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                         US-10-735-577-16
1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gb_sts:
gb_sy:*
gb_un:*
gb_vi:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gb_ba:*
gb_htg:*
gb_in:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #:wo_q6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gb_pat:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gp_ro:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenEmbl:*
                                                                                                                                                         Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Database :
                                                                                                                                                                                                                                                                       Searched:
                                                                                           Run on:
```

	٠ ت	
e a	printe	
to hav	being	ion.
Pred. No. is the number of results predicted by chance to have a	score greater than or equal to the score of the result being printed	and is derived by analysis of the total score distribut
j by	the	re di
icte	e of	800
pred	BCOL	total
ults	the	the
res	겁	οŧ
r of	egua]	увів
umbe	or	anal
the r	than	γ γ
is t	ter	rive(
No.	grea	dez
Pred.	score	and is

SUMMARIES

		æ				
Result No.	Score	Query	Query Match Length DB	DB	ID	Description
-	640.8	53.4	185447	9	AL450992	AL450992 Human DNA
0	638	53.2	638	9	CQ715898	CQ715898 Sequence
о С	637.8	53.2	673	0	BC015973	
Ω 4	601	50.1	649	9	CQ878718	CQ878718 Sequence
n S	601	50.1	649	ø	AR489221	
9	601	50.1	649	9	AX409703	AX409703 Sequence
C 7	601	50.1	649	9	AX710164	AX710164 Sequence
8 U	601	50.1	649	9	AX779835	AX779835 Sequence
0 6	601	50.1	649	6	HUMCLANNII	M38591 Homo sapien
c 10	598	49.9	609	σ	HUMCALPAIL	M81457 Human calpa
c 11	557	46.5	579	Q	AR489209	AR489209 Sequence
12	537	44.8	571	9	AX396675	AX396675 Sequence
c 13	530	44.2	646	σ	AY179865	AY179865 Macaca mu
c 14	523	43.6	582	9	AX899035	AX899035 Sequence
c 15	523	43.6	582	9	BD034568	BD034568 Sequence
c 16	516	43.0	538	9	CQ702692	CQ702692 Sequence
c 17	485.2	40.5	2016	9	AX616317	
c 18	471.6	39.3	482	9	CQ701466	CQ701466 Sequence
c 19	461.4	38.5	472	9	CQ713004	CQ713004 Sequence

CQ711110 Sequence CQ711110 Sequence CQ711110 Sequence M16464 Bowine calp AX777886 Sequence M77483 Human pl1 p CQ700639 Sequence M77483 Human pl1 p CQ700639 Sequence AX77811127 Sequence AX306168 Sequence BC025044 Mus muscu CQ709111 Sequence AX306168 Sequence AX306168 Sequence AX401293 Sequence AX40129 Sequence AX40120 Seq	source databases Em:, EMBL; RMPEP; Information on the WORN s/C_elegans/wormpep This seque erial clone contigs of human ersngar Centre Chromosome 1 N be found at 1 RPCI-11.1 constructed by the
δ δ 14 24 4 H	in the feature table with their source da SusSPROT! Tr: TREMBL; wp:, WORMPEP; Inf database can be found at http://www.sanger.ac.uk/Projects/C_elegar was generated from part of bacterial clor chromosome 1, constructed by the Sanger Chromosome Purther information can be found http://www.sanger.ac.uk/HGP/Chrl RP11-139D23 is from the library RPCI-11.1
18 37.4 480 6 CQ704196 1.4 37.2 474 6 CQ711110 1.4 37.2 474 6 CQ711110 1.3 36.2 448 6 CQ711179 1.3 36.2 604 4 BOVCALPI 1.3 35.3 43 4 6 AX777886 1.3 31.5 39.4 6 AX777886 1.6 28.7 4 AB098817 1.6 28.7 600 10 AX260193 1.8 27.5 600 6 AX407293 1.9 27.5 600 6 AX407293 1.1 2 33.9 6 CQ711137 1.1 2 27.5 600 6 AX407293 1.2 27.5 600 6 AX407293 1.3 27.5 600 6 AX407293 1.4 27.4 570 6 AX489208 1.4 27.4 570 6 AX489208 1.4 27.5 600 6 AX407293 1.5 573 6 AX407293 1.6 16479 9 AC02442 1.6 16489 1 to 185447 1.7 26.4 318 6 AX407293 1.7 2 6.4 570 6 AX40729 1.7 2 7.5 573 6 AX40729 1.8 27.5 600 6 AX40729 1.8 27.5 573 6 AX40729 1.8 27.5 573 6 AX40729 1.8 27.5 600 6	the feature ta ISSROT: Tr., ISBAGOT: Tr., ISBAGO
C 20 448 C 22 434.4 C 22 434.4 C 23 434.4 C 24 423 C 25 389.2 C 28 363.6 C 30 348.8 C 30 348.8 C 31 343.6 C 32 343.6 C 33 343.6 C 34 3329.8 C 34 329.8 C 41 329.8 C 42 329.8 C 42 329.8 C 43 329.8 C 44 329.8 C 44 329.8 C 45 329.8 C 47 329.8 C 48 329.8 C 48 329.8 C 49 329.8 C 49 329.8 C 41 329.8 C 42 329.8 C 43 329.8 C 44 329.8 C 45 329.8 C 47 329.8 C 48 329.8 C 49 329.8 C 48 329.8 C 49 329.8 C 49 329.8 C 41 329.8 C 42 329.8 C 42 329.8 C 43 329.8 C 44 329.8 C 45 317.4 C 45 317.4 C 45 310.8 C 47 329.8 C 47 329.8 C 48 329.8 C 49 329.8 C 49 329.8 C 40 329.8 C 41 329.8 C 42 329.8 C 43 329.8 C 45 310.8 C 46 329.8 C 47 329.8 C 48 329.8 C 48 329.8 C 49 329.8 C 49 329.8 C 49 329.8 C 49 329.8 C 40 329.8 C 41 329.8 C 42 329.8 C 43 329.8 C 44 328.4 C 45 310.8 C 46 310.8 C 47 329.8 C 48 329.8 C 49 329.8 C 49 329.8 C 40 329.8 C 40 329.8 C 41 328.4 C 42 329.8 C 42 329.8 C 43 329.8 C 44 328.4 C 45 329.8 C 46 329.8 C 47 329.8 C 48 329.8 C 4	in SWI SWI ABS WAS CAD GYO GYO HILL

N

```
638 bp DNA Sequence 1832 from Patent WO02068579. CQ715898.1 GI:42276755
                                                                                                                                                                                                                                                                                                                  Patent: WO 02068579-A 1832 06-SEP-2002;
PE Corporation (NY) (US)
                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                 Corporation (NY) (US)
Location/Qualifiers
                                                                                                                                                                                              Homo sapiens (human)
                                                                  155369 ¢¢¢¢¢¢¢¢ 155376
                                                                                                                                                                                                                                                                                                                                                           1. .638
                                                                                                                                                                                                                Homo sapiens
                                          1192 CCCACCGG
                                                                                                                                                                                                                                                                                                           thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                        RESULT 2
CQ715898/c
LOCUS
                                                                                                                                              DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               상. 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       155069 TTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTTGGTTTTAGAAAGTGTA 155128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAATCAAAGAACCCGGCCGTCCTGCGGGGGGGCACGCTGGCGCAGAACCAGAGTAAC 155188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  154888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              154948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 155008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCCCAGACAGAGCGTTCTTGTAAACTTCTTCAGTAGAAACGGTCCTGCTCTCGAATA 155068
of Pieter de Jong. For further details see http://www.chori.org/bacpac/home.htm
VECTOR: pBA663.6
This sequence is the entire insert of clone RP11-139D23 The true left end of clone RP11-353M1 is at 85124 in this sequence. The true right end of clone RP11-38D18 is at 22235 in this sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1071
                                                                                                                                                                                                                                                                                                      /note="Single clone region. Sequence from reads from a short insert library derived from a clone PCR. Restriction digest data confirm the assembly."
                                                                                                                                                                                                    reads from a PCR. Restriction
                                                                                                                                                                                                                                                      reads from a
PCR. Restriction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1132 GGGTCTCGGCGGCCTGCGCCAGTGGAGGGCGGCACCTCCCCCAGAAGCCGGGCTTCCCGC 1191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    771
                                                                                                                                                                                                                                                                                                                                                                                                                            591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGGCGAGCTGGACGCGGGGGGGGGGGGGGCGGCGGCGGCTGTGCTTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACGIGCGCGCGCGCGCTGCTAGAGGCGCGCGCGCGCGGAGCGGAGCCTGCCGCGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGGGGGGGGGCCAGGCCCTGCTCCCGGACCGGCCTCGCAGAGGCCTCGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACGTGGAGTCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                           GGCAGGCGCTCCCCCAGCCCTGTCTCCTCCCCCTTTCCTGCCCCCGACTCCCCGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITCAGGGCATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTTGGTTTTTAGAAAGTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAATCAAAGAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAACCAGAGGTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGGCTCTGCGGCCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACGIGGAGICCIAICGACCICAGAGGCACIAICAGAIIAGCCCIAGGAGGICCGICIGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGGCGAGCTGGACGCGGGGCGGAGAGGCGAGGCGCGGCGGCGCCTTGCCTTAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCAGGGCGCTCCCCCAGCCCTGTCTCCTCCCCCTGCCCCCGGACTCCCCCGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGGGCGCGCCCACGCCCTGCCTCCCGGACCCGCCTCGCAGAGGCCTCGCCC
                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                       53.4%; Score 640.8; DB 9; Length 185447; llarity 97.5%; Pred. No. 7.3e-126; Conservative 0; Mismatches 17; Indels 0; (
                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/chromosome="1"
                                                                                                                                                           /clone_"RP11-139D23"
/clone_lib="RPCI-11.1"
                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                      misc_feature
                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                     Best Local Sim
Matches 651;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1072
                                                                                                                                                                                                                                                                                                                                                                                                                            532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       154769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   155009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              892
                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           154829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              154889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 154949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           155129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             155189
                                                                                             source
                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

```
PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Venter, C.J., Adams, M.C., Li, P.W. and Myers, E.W.
Kits, such as nucleic acid arrays, comprising a majority of
humanexons or transcripts, for detecting expression and other uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 GTGAGGCCCGCAATTAGGGAAAAGATCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     218 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  338 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 AAGCTTATCTGGTATTTAACTTTTGTTTCTTGTGTAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 578 AAGCTTATCTGATTTTAACTTTTCTTTTTGTCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        518 Triracartrigcraagrerecrearcrecreargaaarcerrerargegegaagererege
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         458 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTCCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              278 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            638 GGAACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 TITACATITIGCTAAGIGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAACTAAAAAGAACTTTATTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Eutele
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 638;
                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 53.2%; Score 638; DB 6; Le
Best Local Similarity 100.0%; Pred. No. 1.5e-125;
Matches 638; Conservative 0; Mismatches 0;
```

```
Query Match 53.2%;
Best Local Similarity 99.7%;
Matches 639; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CQ878718/c
                                                                                                                                                 gene
                                                                                                                                                                                                                                                                                                                                                               CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G., Klausher, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buetcw, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S. IL., Wang, J., Hsieh, F., Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L., Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L., Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S., Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J., Morley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Butterfield, Y.S., Krzywinski, M., Touchman, J.W., Green, E.D., Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M., Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smallus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
                                                                                                                                                                                                                                                                                                                                         673 bp mRNA linear PRI 29-JUN-2004 Homo sapiens S100 calcium binding protein A10 (annexin II ligand, calpactin I, light polypeptide (pl1)), mRNA (cDNA clone MGC:23737 BC015973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAL Plate: 32 Row: e Column: 16.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 673)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Direct Submission
Submitted (22-OCT-2001) National Institutes of Health, Mammalian
Gene Collection (MCC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDNA Library Preparation: CLONTECH Laboratories, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anuradha
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                   Trigericricatical described contrates and a second contrates and a se
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
12477932
                                                                                                                                              638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                            CTGGACGCGGGCGAGAGGCGAGCGCGGCGGGCTGTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone="MGC:23737 IMAGE:4103596"
                                                                                                                                              CTGGACGCGGGCGGAGAGGCGAGCGCGGCGGCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BC015973.1 GI:16359017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 673)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . .673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Strausberg, R.
                                                                   98
   541
                                                                                                                                              601
                                                                                                                                                                                                             38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                            BC015973/c
                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                        g
                                                                                                                                                                                              g
ò
                                                                                                                                          ઠે
```

```
1. .673
| Gene="S100A10" | ANXZLG | GP11, Ca[1], p10, 42C, CALILL, ANXZLG | GP11, Ca[1], p10, 42C, CALILL, ANXZLG | Calll, P1" | Calll, P10 | Calll, Calll,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181 GCAGATICCTTAAGCGACCCTTIGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GIGAGGCCCGCAATTAGGGAAAAAAGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              341 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCACACTGG 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           281 rccaggrccrrcarrarrrrgrccacaggccagaggrcrrrrrgarrrrccaaaaarcca 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  221 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTTTTAGTAGCCTTTTATCCCCA 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              641 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGGTGTCGTCGTTGAAGCCTTGGCCGAGGCGCGCGGGGCGCTGGGCCGAGCTGGGCGAAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCAGGTCCTTCATTATTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGACGCGGGGGGGAGAGGCGAGCGCGGCGGCCTGTGCGC 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue type="Brain, glioblastoma"
/clone_lib="NIH_MGC_57"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 637.8; DB 9;
Pred. No. 1.7e-125;
0; Mismatches 2;
                                                                                                                              /note="Vector: pDNR-LIB"
```

ö

Page

```
PAT 15-MAY-2004
                                                                                                                                                                                                                 1. (bases 1 to 649)
Stanton,L.W., White,R.T., Damm,D.L., Lewicki,J.A., Joly,A. and Schreiner,G.F.
Wethods for detection and use of differentially expressed genes in disease states
Patent: US 6709855-A 36 23-MAR-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                          2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     469 GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTAATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            230 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                110 TTGGTGTGGTCCGTTGAAGCCTTGG-CGAGGCGCGGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       649 GGAACTAAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    589 AAGCTTATCTGTATTTAACTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 TITACATTIGCTAAGIGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               290 TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTGATTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TIGGIGIGGICCGITGAAGCCTIGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                        2,
                                                                                                                                                                                                                                                                                                                                                                                                           Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                        50.1%; Score 601; DB 6; L
99.7%; Pred. No. 1.2e-117;
iive 0; Mismatches 0;
                                                                                            AR489221
Sequence 36 from patent US 6709855.
                                                                                                                                                                                                                                                                                                                                                              /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               625
                 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27
                                                                                                                                                                                                                                                                                                               Location/Qualifiers
1. .649
/organism="unknown"
51 CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGACGCGGGGGGAGAGGCGAGC
                                                                                                                                         AR489221.1 GI:47256166
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 99.7
Matches 623; Conservative
                                                                                                                                                                                                        Unclassified.
                                                                                                                                                                 .
Unknown.
                                                                                                                                                                                         Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541 '
                 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                              RESULT 5
AR489221/c
                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                               LOCUS
                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                             112. .405
/note="unnamed protein product"
/note="unnamed protein product"
/codon strut=1
/protein id="CHF5951.1"
/db_xref="C1:53791166"
/tb_xref="C1:53791166"
/translation="MPSQMEHAMETWMFTFHKFAGDKGYLTKEDLRVLMEKEFPGFLE
NQKDPLAVDKIMKDLDQCRDGKVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
   04-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22
                                                                                            Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCAGGTCCTTCATTTTTTTTTCTCCACAGAGGGTCTTTTTGATTTTCCAAAAATTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGCCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGGTGTGCTCCGTTGAAGCCTTGGCCGAGGCGCGGACGCTGGGCGAAGCTGGGCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGGTGGTCGTTGAAGCCTTGG- CGAGGCGCGGCGGACGCTGGGCGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTAATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                      Yeh, L.A., Cuny, G.D., Padmanaban, D. and Ding, K. Methods and compositions for neurite outgrowth detection Patent: WO 2004080424-A 3 23-SEP-2004; THE BRIGHAM AND WOMEN'S HOSPITAL, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2;
   PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 50.1%; Score 601; DB 6; Length 649; Best Local Similarity 99.7%; Pred. No. 1.2e-117; Matches 623; Conservative 0; Mismatches 0; Indels
   linear
 CU878718 649 bp DI
Sequence 3 from Patent WO2004080424.
                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
1127..405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601 CTGGACGCGGGCGGAGAGGCGAGC 625
                                                                                                                                                                                                                     Location/Qualifiers
1. .649
                                             CQ878718.1 GI:53791165
                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                     source
              DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                          ORGANISM
                                                                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                CDS
                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
```

g

셤

ò

ò

ያ ያ

g

8 6

g &

ઠે

g

8 8

q ð g ò

ò

```
/note="unnamed protein product"

/codon start=1
/potein id="CAD88531.1"
/db_xref="G1:29786760"
/translation="MPSQMEHAMETPHKFAGDKGYLTKEDLRVLMEKEFPGFLE NQKDPLAVDKIMKDLDQCRDGKVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
                                       PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 649 GGAACTAAAAAAGAACTTTATTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTGCCTACTTCTCTTTCCCTTCTGCTTCATGTGTACTACAAAAATAGTCATTGCATTGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGGCGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGGCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                230 GGGAACTCCCTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        170 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGAACTAAAAAAGAACTTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   529 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 GCAGATTCCTTAAGCGACCCTTTGGGACTACTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                   S Okuse, K., Baker, M., Poon, L., Wood, J.N. and Malik-Hall, M. Sodium channel regulators and modulators Sodium channel regulators and modulators University College London (GB)

Location/Qualifiers
Location/Qualifiers
Location/Qualifiers
Location/Qualifiers
Amol_type="unassigned DNA"
/Mol_type="unassigned DNA"
/Mol_type="unassigned DNA"
/Mol_type="unassigned DNA"
/Mol_type="unassigned"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
?
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 649;
                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 50.1%; Score 601; DB 6; L. Best Local Similarity 99.7%; Pred. No. 1.2e-117; Matches 623; Conservative 0; Mismatches 0;
                                        DNA
                                     649 bp
7 from Patent WO03016917
                                                                                         AX710164.1 GI:29786759
                                                                                                                              Homo sapiens (human)
Homo sapiens
                                     AX710164
Sequence
                                                                      AX710164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                 AX710164/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                    ORGANISM
                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                              CDS
                                                                                                                                                                                                                                                                                                FEATURES
   RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            졍.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                     PAT 14-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTTGTTTTAGATTTTATT 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCAGGTCCTTCATTATTTTGTCCACAGGCGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGTCTTTTTGATTTTTCCAAAAATCCA 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           170 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52
                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGACGCTGGGCGAGCTGGGCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                      Alvares,C., Horne,D., Peres-da-Silva,S. and Vockley,J.G. Gene expression profiles in liver cancer Patent: WO 0229103-A 2350 11-APR-2002; GENE LOGIC US)

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  tch 50.1%; Score 601; DB 6; Length 649; al Similarity 99.7%; Pred. No. 1.2e-117; 623; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                            /note="EMBL/GenBank Accession No. M38591"
                                       linear
                         AX409703 649 bp DN
Sequence 2350 from Patent WO0229103.
AX409703
                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGACGCGGGGGGGGGGGGGGG 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGACGCGGGCGGAGAGCCGAGC
                                                                                         AX409703.1 GI:21442408
                                                                                                                            Homo sapiens (human)
                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                        source
                 AX409703/c
LOCUS
                                                    DEFINITION
                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                             JOURNAL
RESULT 6
                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 & 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ል ස ጵ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 & B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠ
```

9

120 530 180 470 240 420

231

291

351

480

171

540

유 ò 용

```
/protein id="AAA58426.1"
/db xref="GI:180596"
/translation="MPSQMEHAMETYMFTFHKFAGDKGYLTKEDLRVLMEKEFPGFLE
NQKDPLAVDKIMKDLDQCRDGKVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Original source text: Homo sapiens (tissue library: lambda-GT10)
adenocarcinoma cDNA to mRNA.
Draft entry and computer-readable sequence for [Unpublished (1990)]
by V.Gerke, 17-SEP-1990.
Max-Planck-Institute for Biophysical Chemistry
Dept Biochemistry
Am Fassberg
                                                                                                                                                                                                                                         mRNA linear PRI 31-DEC-1994
annexin II (pll) mRNA, complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     649 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATACAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       530
                      541 TIGGIGIGGICCGIIGAAGCCIIGGCCGAGGCGCGGGGGGACGCIGGGCGACCIGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                    M.38591.1 GI:180595
Cellular ligand of annexin II.
Homo sapiens (human)
Homo sapiens (human)
Homo sapiens (human)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 649)
Fube, E., Weber, K. and Gerke, V.
Fube, E., Weber, K. and Gerke, V.
Primary Structure of human, chicken, and Xenopus laevis pl1, a cellular ligand of the Src-kinase substrate, annexin II
                                                          52
                                           110 TTGGTGTGGTCCGTTGAAGCCTTGG-CGAGGCGCGGCGGAGCTGGGCGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    589 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GGAACTAAAAAAAAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'product="cellular ligand of annexin II"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 50.1%; Score 601; DB 9; I
Best Local Similarity 99.7%; Pred. No. 1.2e-117;
Matches 623; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="mRNA"
/db_xref="taxon:9606"
/cell_line="HT29"
/tissue_type="adenocarcinoma"
/tissue_lib="lambda-GT10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
                                                                                                                                                                                                                                             HUMCLANNII 649 bp
Homo sapiens cellular ligand of
                                                                                                   601 CTGGACGCGGGGGGAGAGGCGAGC 625
                                                                                                                                       27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  D-3400 Goettingen, FRG.
Location/Qualifiers
                                                                                                                               51 CTGGACGCGGGCGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                codon start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene="p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /gene="p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   624. .629
/gene="p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /gene="p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              91340161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1831433
                                                                                                                                                                                                                                                                                                       M38591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polyA_site
                                                                                                                                                                                                     RESULT 9
HUMCLANNII/c
                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene
                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                        a
                                                                                                 ò
                                                                                                                                                                                                     PAT 14-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           589 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTATT 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATTCCTTAAGCGACCCTTT-GGACACTCTTATCAGGAGGAGGAGCGAACTGCTCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                      52
                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
AAGCTTATCTGGTATTTAACTTTTCTTTCTCTCGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                     Haferlach, T., Schoch, C., Kern, W., Kohlmann, A., Schnittger, S. Dugas, M., Ells, R., Brors, B. and Mergenthaler, S. Novel genetic markers for leukemias Patent: WO 03039443-A 1992 15-MAY-2003; Deutsches Krebsforschungszentrum (DE); Ludwig-Maximilian-Universitaet Muenchen (DE); Haferlach, To: PD Dr. Dr. (DE); Schoch, Claudia (DE); Kern, Wolfgang (DE) Dr. Dr. (DE); Schoch, Claudia (DE); Kern, Wolfgang (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 50.1%; Score 601; DB 6; Length 64 Best Local Similarity 99.7%; Pred. No. 1.2e-117; Matches 623; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                     linear
                                                                                                                                                                                                   AX779835 649 bp DNA Sequence 1992 from Patent WO03039443. AX779835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
                                                            625
                                                                                               CTGGACGCGGGCGGAGAGGCGAGC 27
                                                            CTGGACGCGGGCGAGAGGCGAGC
                                                                                                                                                                                                                                                                AX779835.1 GI:32696829
                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         170
                      110
                                                            601
                                                                                                 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                              RESULT 8
AX779835/c
                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                     LOCUS
```

셤

à

셤

ઠે ద 8

ò

g

8 8 ò 임

ò g ò 셤

490

550

180 430

8 6

6 6 6 6 6

8 6 8 6 8 6 8

8

8 8 g

```
/translation="MPSQMEHAMETWMFTFHKFAGDKGYLTKEDLRVLMEKEFPGFLE
MOXDFLANDKIMKDLDQCRDGRVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
584. .593
/gene="calpactin 1 light chain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 15-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The figure of the first of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCGAATTIGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGGCCCGCAATTAGGGAAAAAAAGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          310 GTGAGGCCCCCAATTAGGGAAAGAAGCTCTGGAAGCCCACCTTTGCCATCTCTACACTGG 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCAGGTCCTTCATTATTTTGTCCACCAGAGGGTCTTTTTGATTTTTCCAAAAATCCA 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                   TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         190 GGGAACTCCTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTATCCCCA
                                                                                                                                                                                                                                                   130 GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                            1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                    ä
                                                                                                                                Length 609
                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                              Score 598; DB 9; L
Pred. No. 5.2e-117;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR489209 579 bp
Sequence 24 from patent US 6709855.
AR489209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR489209.1 GI:47256154
                                                                                                                                   / Match
Local Similarity 99.8%;
les 609; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGACGCGG 610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGACGCGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                            polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                      489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10
                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
AR489209/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRI 31-DEC-1994
                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                     GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                       TCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATG 300
                                                                                                                                                                                                                            GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                       TCCAGGTCCTTCATTATTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                         Treererectecerreaageerreeceaageceecegaacecreeceaacerregeceaag 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       M81457.1 GI:179874
calpactin I light chain.
Homo sapiens (human)
Homo sapiens
Homo sapiens
Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases I to 609)
Dooley, T.P., Welland, K.L. and Simon, M.
CDNA sequence of human p11 calpactin I light chain
9234785
1386341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Original source text: Homo sapiens (tissue library: lambda gtll) cDNA to mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCGAATTGTGAAATGTAAACATCGTGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGGTGTGGTCCGTTGAAGCCTTGG-CGAGCGCGCGGGACGCTGGGCCGAGCTGGGCGGAG
                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                הטיירה אראם לה 609 pm mRNA linear
Human calpactin l light chain mRNA, complete cds.
M81457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/map="presumed at 1921"
/cell_type="primary keratinocyte"
/tisque_lib="lambda gtll"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /gene="calpactin 1 light chain"
/codon_start=1
/codon_stre=1
/product=rcalpactin 1 light chain"
/protein_id="AAA58404.1"
/db_xref="G1:179875"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'gene="calpactin 1 light chain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGACGCGGGCGGAGGCGAGC 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           72. .365
                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                          350
                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                              290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       110
                                                                                                              181
                                                                                                                                                          469
                                                                                                                                                                                                                                               410
                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HUMCALPAIL/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
```

131

```
AY179865

Macaca mulatta S100 calcium binding protein A10 (S100A10) mRNA, complete cds.

AX1779865.1 GI:27802540
                                       ö
                                                                                                                                       120
                                                                                                                                                        88 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTANATTTTATT 147
                                                                                                                                                                                                         180
                                                                                                                                                                                                                                          207
                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                          267
                                                                                                                                                                                                                                                                                                                                                                        327
                                                                                                                                                                                                                                                                                                                                                                                                                                        387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            567
                                                                        9
                                                                                                      87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Si
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 646)

Sun,X.-Y., Tan,Y.-F., Qin,L., Bai,S.-X., Li,F.-X., Qiu,W.,

Piao,Y.-S. and Wang,Y.-L.

Molecular cloning of genes critical to embryo implantation from Rhesus monkey by suppression subtractive hybridization
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sun,X.-Y., Tan,Y.-F., Qin,L., Bai,S.-X., Li,F.-X., Qiu,W., Sun,X.-Y., Tan,Y.-F., Qin,L., Bai,S.-X., Li,F.-X., Qiu,W., Piao,Y.-S. and Wang,Y.-L.
Direct Submission
Submitted (14-NOV-2002) State Key Laboratory of Reproductive Biology, Institute of Zoology, Chinese Academy of Science, Bei Huan Xi Lu, #25, Hai Dian District, Beijing 100080, China Location/Qualifiers
                                                                                                                                                                                                                            148 TITACATTIGCTAAGIGICCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGIGGG
                                                                                                                                                                                                                                                                         181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTTT
                                                                                                                                                                                                                                                                                                                                                                     328 GTGAGGCCCGCAATTAGGGAAAANAAGCTCTGGAAGCCCACTTTGCCATCTNTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          388 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           448 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                        28 GNAACTAAAAAANAACTITATITATITGAGGGCAAGGGGGATGCAAACAAAAATCAA
                                                                                                                                       61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                         TITACATITIGCIAAGIGICCIGAICIGCICAIGAAAICCITCIAIGGGGAAGCIGIGGG
                                                                                                                                                                                                                                                                                          208 GCANATICCTIAAGCGACCCTITIGGGACAACTCTIAICAGGAGGAGGAACGAACTGCTCAIT
                                                                                                                                                                                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA
                                                                       1 GGAACTAAAAAAAAACTTTATTTATTGAGGGCAAGGGGATGCAAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361 TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                       Gaps
                                       ö
   Length 571,
                                      Indels
 Score 537; DB 6; 1
Pred. No. 5.2e-104;
0; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Macaca mulatta (rhesus monkey)
      44.8%;
                    Best Local Similarity 98.7
Matches 537; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Macaca mulatta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541 TTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TIGG
                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            568
                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                           301
      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 13
AY179865/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                        ò
                                                                                                      유
                                                                                                                                       δ
                                                                                                                                                                 g
                                                                                                                                                                                                         à
                                                                                                                                                                                                                                   임
                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 18-MAY-2002
                                                                                                        2,
                                                                                                                                                                                                                                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                          120
                                                                                                                                                                                                                                          460
                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                            GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGGAGCGAACTGCTCATT 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTATTTTGTCCACCAGAGGGTCTTTTTGATTTTTCCAAAAATCCA 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAGCCCACTTTGCCATCTCTACACTGG 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATTATTCCCCA 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             King, G.E., Meagher, M.J., Xu,J. and Secrist, H. Compositions and methods for the therapy and diagnosis of colon cancer
                                                                                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                         AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGAATTTCTGAAATGTAAAACATCATGCTTTCCATGCGTTTCCATTTGAGATGAATTT
                                                                                                                                       1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                        Gaps
                                                                                                        7
                                                                        6; Length 579;
                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGAC 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGGTGTGGGTCGTTGAAGCCTTGG-CGAGGCGCGGGGGC
                                                                     Score 557; DB 6; L
Pred. No. 2.9e-108;
O; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent: WO 0212328-A 890 14-FEB-2002;
CORIXA CORPORATION (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                571 bp |
WO0212328.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .571
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 890 from Patent
AX396675
AX396675.1 GI:21067422
                                                                   46.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens (human)
                                                                                      Best Local Similarity 99.7
Matches 579; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ното варіепв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX396675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HOMO
                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                          340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                        519
                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                          459
                                                                                                                                                                                                                                                                                                                                                                          399
                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX396675
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                      ORIGIN
```

g

ò 용 ò 셤

ò

S 8

8 6 8

셤 ò 8 S 8 6 8 6

σ

ä

Gaps

4

523 149 463

83

345 329

269

389 225 449

285

509

107 569

167

```
CATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACA 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTT--GACA 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 582)

Edwards, J.B. D.M.; Duclair, E. and Jordan, J.Y.

Sequence tag and encoded human protein
Patent: JP 2001269182-A 10814 02-OCT-2001;

GENSET

OS JP 2001269182-A/10814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     510 TTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGTTGAAGCCTTGGCCGA 569
106 TTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCGTCGTTGAAGCCTTGGCCGA 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGAAGCCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       404 ACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTCCCTTCTGCTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGAACTCCTTTTCCATGAGTACTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          224 CAGAGGGTC--TITGAITITCCAAAAAICCAGGAACTCCTITTCCAIGAGTACTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GICCICCITIGITAAGIAGCCITTAICCCCAGCGAAITTGIGAAAIGIAAACAICAIGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTCTTATCAGGGAGGGGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                    TCTGCTTGTCAAATGAGAGTTAGATTTATTTTTACATTTGCTAAGTGTCCTGATCTGCT
                                                                                                                                                                                                                                            Length 582;
  Expressed sequence tags and encoded human proteins Patent: EP 1033401-A 14898 06-SEP-2000; Genset (FR)
                                                                                                                                                                                                                                         Query Match 43.6%; Score 523; DB 6; Length 58 Best Local Similarity 97.9%; Pred. No. 5.1e-101; Matches 547; Conservative 4; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     582 bp DNA human protein.
                                                                                             1. .582
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCGCGGCGGACGCTGGGC 588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BD034568
Sequence tag and encoded
BD034568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCGCGGGCTGTGCGC 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BD034568.1 GI:22576310
JP 2001269182-A/10814.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              390
                                                                                                                                                                                                                                                                                                                                       30
                                                                                                                                                                                                                                                                                                                                                                                   582
                                                                                                                                                                                                                                                                                                                                                                                                                                     90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 15
BD034568/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                             /Godon start=1
/product="S100 calcium binding protein A10"
/protein id="AAQ21200.1"
/db_xref="G1:27802541"
/tb_xref="G1:27802541"
/translation="MSGOMEHAMETMWFTFHKFAGDKGYLTKEDLRVLMEKEFPGFLE
NQKDPLAVDKIMKDLDQCRDGKVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTCAAGCGACCCTTTGGGGACGGAGGAGGAGGAGGAATTGCTCGTT 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       317 GTGAGGCCCGCAATTAGGGAAAAGACTCTGGAAGCCCACTTTGCCATCTCTGCAGCTGG 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCAGGTCCTTCATTATTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        197 GGAAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCTTTTATCCCC 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       617 GGAACTAAAAAAGAACTTTATTTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITACATITICCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Greacececenaria accada a de contracecentrace de contracecente de contracece de contrac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              257 TCCAGGTCCTTCATTATTTTGTCCACGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GGAACTAAAAAGAACTTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dumas Milne Edwards, J.B., Duclert, A. and Giordano, J.Y.
                                                                                                                                                                                                                                                                                                                                                             Length 646;
                                                                                                                                                                                                                                                                                                                                                        Query Match 44.2%; Score 510; DB 9; Length 64 Best Local Similarity 96.4%; Pred. No. 1.7e-102; Matches 542; Conservative 0; Mismatches 20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 14898 from Patent EP1033401.
AX899035
/organism="Macaca mulatta"
/mol_type="mRNA"
/db_xref="taxon:9544"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGGTGTCCGTTGAAGCCT 562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TIGGIGIGICTGTIGAAGCII 56
                                                                                           /gene="S100A10"
79. .372
                                                                                                                                         gene="S100A10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX899035.1 GI:40053948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX899035/c
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                            gene
                                                                                                                      CDS
                                                                                                                                                                                                                                                                                                              DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음 강
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

PAT 27-AUG-2002

ij

67

476 127 416 187 356 247 296 307 236 367

```
PAT 20-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 115 CCTTCATTATTTTGTCCACACCAGAGGCTCTTTTGATTTTCCAAAAATCCAGGGAACT 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccgcaattagggaaaagaagctctggaagcccactttgccatctrctacactggtcaggt 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                             535 AAAAAGACCTTTATTATTGAGGGAAAGGGGATGCAACCAATCCAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                          TCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTATTTTACAT
                                                                                                                                                                                                                                                                                                                                        475 TCTGGTATTTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACAT
                                                                                                                                                                                                                                                                                                                                                                                     TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                     415 TIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTICITICCCTICTGCTTCATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTTCATTATTTTGTCCACAGGCGAGGGTCTTTTTGATTTTCCAAAATCCAGGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGCGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                115 CCTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGGGAATT
                                                                                                                                                                                                                                                               AAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTGAAATGTAAACATCGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTG 543
                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1;
 Mammalia; Butheria; Primates; Catarrhini; Hominidae;
              1
Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Chent: WO 02070737-A 47618 12-SEP-2002;
Chondrogene Inc. (CA)
                                                                                                                                                                                                   Length 538
                                                                                                                                                                                                  Score 516; DB 6; Length 53
Pred. No. 1.6e-99;
0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1
Bejanin,S. and Tanaka,H.
Human cdnas and proceins and uses thereof
Patent: WO 02094864-A 1 28-NOV-2002;
GENSET (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                         1. .538
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1 from Patent W002094864.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX616317.1 GI:28447361
                                                                                                                                                                                                  Query Match
Best Local Similarity 98.9%;
Matches 530; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                          89
                                                                                                                                                                                                                                                                                                                                                                                       128
                                                                                                                                                                                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 17
AX616317/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                REFERENCE
AUTHORS
                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 03-FEB-2004
                                                                                                         ы
                                                                           ^{PC}
                                                                                                                                                                                                                                                                                                                                                          GGCAAGGGGATGCAAACAATACAAAATCAAAAGCTTATCTGGTATTTAACTTTTC 523
                                                                                                                                                                                                                                                                                                                                                                                                       149
                                                                                                                                                                                                                                                                                                                                                                                                                                    463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAG 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGAGGGTC--TTTGATTTTCCAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCA 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGT 509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACA 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTOTTATICAGGGAGGGGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCAT 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCT 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGC 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGTTGAAGCCTTGGCCGA 569
                                                                                                                                                                                                                                                                                                                                            83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                      C C12P21/02,C12P21/08,C12Q1/68//G06F17/30,C12N15/00,C12N5/00,
G06F15/40
                                                                           C12N15/09, C07K14/435, C07K16/18, C12N1/15, C12N1/19, C12N1/21,
                                                                                                                                                                                                                                                                                                                                                                                                       TCTGCTTGTCAAATGAGAGTTAGATTTTTATTTTACATTTGCTAAGTGTCCTGATCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                         TCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCTAAGTGTCCTGATCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCCTCCTTTGTTAAGTAGCCTTTATYCCCAGCGAATTTGYGAAATGTAMACRTCATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCCATGGCGTGTTCCATTTGAGATGGCATTTTTGGTGGTCCGTTGAAGCCTTGGCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTCCCTTCTGCTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                          Gaps
              24-FEB-2000 JP 2000118773
26-FEB-1999 US 60/122487
JEAN BAPUTIST DUMAS MILNE EDWARDS, EIMERIC DUCLAIR, JEAN
                                                                                                                                                                                                                                                                                                             4;
                                                                                                                                                                                                                                                                           43.6%; Score 523; DB 6; Length 582; 97.9%; Pred. No. 5.1e-101; ive 4; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                   Location/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 47618 from Patent W002070737.
CQ702692
                                                                                                                                                                                   1. .582
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCGCGCGGACGCTGGGC 588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CQ702692.1 GI:42263461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dececeecederarecec
                                                                                                                                                                                                                                                                                           Best Local Similarity 97.9
Matches 547; Conservative
                                                            JORDAN
PD 02-OCT
PF 24-FEB
PR 26-FEB
PI JORDAN
PC C12N15
C12N5/10,
PC C12P15
                                                                                                                                      SE
                                                                                                                                                                                                                                                                                                                                          30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        510
                                                                                                                                                                                                                                                                                                                                                                        582
                                                                                                                                                                                                                                                                                                                                                                                                       90
                                                                                                                                                                                                                                                                                                                                                                                                                                    522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  46
                                                                                                                                                                                                                                                                             Query Match
Best Local 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 16
CQ702692/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOUNCE
ORGANISM
                                                                                                                                                                                      source
                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             名
```

487

```
PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      132
                                                                                                                                                                                                                                                                                                                                                                       GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 119
                                                                                                                                                                                                                                                                                                                           419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         358 TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAGATICCTTAAGCGACCCTITGGGGACAACTCTTATCAGGGAGGGAGCGAACTGCTCAII 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361 TCCAGGTCCTTCATTATTTTGTCCACAGGCCCAGAGGGTCTTTTGATTTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCAGGTCCTTCATTATTTTGTCCACAGGCAGGGCTCTTTTTGATTTTCCAAAAATCCA 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCC 478
                                                                                                                                                                                                                                                                                                            181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATTTAACTTTTCTTTCTCTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCT
                                                                                                                                                                                                                                                                             1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITACATITIGCIAAGIGICCIGAICTGCICAIGAAAICCITCIAIGGGGAAGCIGIGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCC
                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                             6; Length 482;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737-A 57930 12-SEP-2002;
Chondrogene Inc. (CA)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    38.5%; Score 461.4; DB 6; 98.7%; Pred. No. 6.8e-88; iive 0; Mismatches 6;
                                                                                                                                                                          39.3%; Score 471.6; DB 6
.larity 99.2%; Pred. No. 4.5e-90;
Conservative 0; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CQ713004 472 bp DNA
Sequence 57930 from Patent WO02070737.
CQ713004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

    .482
    /organism="Homo sapiens"
    /mol_type="unassigned DNA"
    /db_xref="taxon:9606"

     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CQ713004.1 GI:42273861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .472
                                                                                                                                                                                                    Local Similarity
nes 474; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 465;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28
                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COT13004/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                1435. 1839
/note="unnamed protein product"
/note="unnamed protein product"
/codon grart=1
/protein id="CAN67623.1"
/db_xref="G1:28447362"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITITITITITITICITICCTCTGCTTGTCAAATGAGAGTTAGATTTTATATTTTTACATTTGCT 1953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1652 TCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCTTTATCCCCAGCGAATTTGTGA 1593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1772 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITCCCTICTGCTTCATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCA 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rccargagracrcrcaggrccrcrrrrgrraagragccrrrarccccagcgaarrrgrga 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      133 AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTC 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTAGGGAAAAGACCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1712 ATTATTTGTCCACAGGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTATTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      73 TATTIAACTITICITICICIGCTIGICAAATGAGAGTTAGATTITIACATTIGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTGAAGCCTTGGCCGAGGCGCGCGGCGACCTTGGGCGAGCT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
40.5%; Score 485.2; DB 6; Length 2016;
Best Local Similarity 94.7%; Pred. No. 6.7e-93;
Matches 502; Conservative 0; Mismatches 28; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737-A 46392 12-SEP-2002;
Chondrogene Inc. (CA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CQ701466 4392 from Patent WO02070737.
Sequence 46392 from Patent WO02070737.
CQ701466.1 GI:42262233
       DNA"
/mol_type="unassigned
/db_xref="taxon:9606"
1. .1434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                            polyA_signal
polyA_site
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CQ701466/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                 5'UTR
CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
```

장 월

8 g ò

유 ò g

ઠે

g ò g ò g

ઠે

요

ઠે a

요

8 6

ò

상 원

g

8

ۇ 1

g

ò 쉱

õ

```
PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    415
                                                                     362
                                                                                                                                                                                      482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            355
               302
                                        181
                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          427
                                                                                                                             363 CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTICITICCCTICIGCTICATGIGIACIACAAAATAGICATIGCATGCAATGGIGAGGC 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    55
                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                      180 GAGGCCCGCAATTAGGGAAAACAAGCTCTGGAAAGCCCACTTTGCCATCTTACACTGGTC
                                                                                                                                              414 TCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTTCATTATTTTGTCCACAGCCAGAGGSTCTTTTTGATTTTCCAAAAATCCAGGAAACT
               303 GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   474 AAAAGAACTITATITATIGAGGGCAAGGGGATGCAAACNACCNCAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68 TCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTATTTTACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         354 TIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATTTCTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGCAATTAGGGAAAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             174 CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAAGAACTTTATTTATTGGGCAAGGGGATGCAAACAAT-ACAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 474;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737-A 56036 12-SEP-2002;
Chondrogene Inc. (CA)
                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 37.2%; Score 446.4; DB 6; Best Local Similarity 98.9%; Pred. No. 1.1e-84; Matches 469; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                   Sequence 56036 from Patent W002070737.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .474
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                 CQ711110.1 GI:42271967
                                                                                                                                                                                                                                                                                                                                                        .
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         σ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           368
                                                                                                                                                                                                                                                            RESULT 21
CQ711110/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                  g
                                                                                         셤
                                                                                                                           ò
                                                                                                                                                        g
                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                    8
                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA 192
                                                                                    252
                                                                                                                                            312
                                                                                                                                                                                                      372
                                                                                                                                                                                                                                                               432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       293
                                                                                                                                                                         233
                                                                                                                                                                                                                      ATTAGGGAAAAGAGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 173
                                                                                                                                                                                                                                                                              GTTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT 113
                                                                                                                                                                                                                                                                                                                       TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62
                                                                                                                                                                                                                                                                                                                                                 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                   TITCCCTICTGCTICAGAGGGCCGGA
                                                                                                                                                                                                                                                                                                                                      TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCTAAAAAAAGACCTTTATTTATTGAGGGCAAGGGGATGCAACCAATCCAAAAATCAAAA
TATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACATTTGCT
                                                                                                                                                                                                      ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                             ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 AACTAAAAAAGAACTTTATTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                               AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                            N
                                                                                                                                                                                                                                                                                                                                                                                              AATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGAGGCATTTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Liew, C.C., Marshall, W.E. and Zhang, H.
Compositions and methods relating to osteoarthritis
Parent: WO 02070737-A 49122 12-SEP-2002;
Chondrogene Inc. (CA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          85;
20; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        37.4%; Score 448; DB 6;
95.8%; Pred. No. 4.9e-85;
cive 0; Mismatches 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 49122 from Patent W002070737.
CQ704196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .480
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CQ704196.1 GI:42264965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 95.8
Matches 460; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ношо
                                                                                                                                                                                                                                                                                                                                                                               493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                      412
                                                                                                              352
                                                                                                                                                                         292
                                                                                                                                                                                                                               232
                                                                                                                                                                                                                                                             373
                                                                                                                                                                                                                                                                                         172
                                                                                                                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                                                                                                                  112
                                                                                                                                                                                                                                                                                                                                                                                                         52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                           133
                                                                                   193
                                                                                                                                            253
                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                              CQ704196/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
```

ORIGIN

g

8

8 6

ል ይ

원

ò

```
organism="Bos taurus"
                                                                                                                                                                                                                                         /mol_type="mRNA"
/db_xref="taxon:9913"
1. .604
                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                bp upstream of Ncol site.
                                                                                                                                                                                                                                                                                                            /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                  98
                                                                                                                                                                                                                                                                                                                                                                                                                                N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      479
                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                        source
   ORGANISM
                                            REFERENCE
AUTHORS
                                                                                                                     MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                  mRNA
                                                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                           FEATURES
                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Я
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              bovcabri
Bovine calpactin I light chain (pl1) mRNA, complete cds.
M6464 J02779
M16464.1 GI:162784
calpactin I light chain; protein kinase; tyrosine kinase.
Bos taurus (cow)
                                                                           PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                               AAAGCTTATCTGGTATTTAACTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTAT 119
                                                                                                                                                                                                                                                                                                                                                                                                           388 AAAGCTTATCTGGTATTTAACTTTTTTTTTCTTTGTCTAGTGAGAGTTAGATTTAT 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                      268 GGCAGATTCCTTAAGCGACCCTTTGGGACCAACTCTTATCAGGGAGGAGGGGCGAACTGCTCAT 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITIACAITIGCIAAGIGICCTGAICIGCICAIGAAAICCIICIAIGGGGAAGCIGIGG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTGAGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GICCAGGICCTICATTATTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAAICC 419
                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                      1 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAAC-AATACAAAAATCA 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
   480
CCTTTTCCATGAGTACTCTCAGGTCC-TCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                          Query Match

36.2%; Score 434.4; DB 6; Length 448;
Best Local Similarity 99.6%; Pred. No. 3.9e-82;
Matches 446; Conservative 0; Mismatches 1; Indels 1
                                                                                                                                                                                   Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737-A 56504 12-SEP-2002;
Chondrogene Inc. (CA)
Location/Qualifiers
                                                                       448 bp DNA Sequence 56504 from Patent WO02070737. CQ711578.1 GI:42272435
                                                                                                                                                                                                                                          1. .448
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGGAACTCCTTTTCCATGAGTACTCTC 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                9
 428
                     54
                                                                                                                                                                                                                                                                                                                                                                           448
                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                   RESULT 22
CQ711578/C
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 23
BOVCALPI/c
                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ₹
 ઠે
                  셤
                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                  ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

```
/proteIn_id="AAA30423.1"
| DiscreTin_id="AAA30423.1"
| DiscreTin=id="YESQMEHEMETWHFTFHKFAGDKGYLFKEDLRVLMEKEFPGFLE
| AKDPLAVDKIMKDLDQCRDGKVGFQSFFSLIAGLTIACNDYFVVHMKQKGKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCTTATCTGG---TATTTAACTTTTCTTTCTCTGTCAAATGAGAGTTAGATTTTA 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGACAGAGTCCTTAAGTGACCCTTTATGAGAATTCTTATCAGGGTGGGGAGTAATTGCTCA 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         364 ATGCTGCCTACTTCTTCCCCTTCTGCTTCATGTACTACAAAATAGTCATTGCATGCGGA 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCC 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCGAATTTGTGAAATGTAAACATCGTGTTTCCATGGCGTGTTCCATTTGAGATGGCA 538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 482 Trigiacarrirchardedrec-cararderea-gaaareerraraeagggaagerere 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTCCAGGTCCTTCATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATC 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGTCCAGGTCCTTCATTATTTTGTCCACGCCAGAGGGTCTTTTTGATTTTCCAAAAATC 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACT 358
                                                                                           1 (bases I to 604)

Martin (bases I to 604)

Saris, C.J., Kristensen, T., D'Eustachio, P., Hicks, L.J., Noonan, D.J.

Hunter, T. and Taack, B.F.

CDNA sequence and tissue distribution of the mRNA for bovine and
murine pl1, the S100-related light chain of the protein-tyrosine

Kinase substrate p36 (calpactin I)

J. Biol. Chem. 262 (22), 10663-10671 (1987)
                                                                                                                                                                                                                                                                                                                                                                                                                                            Draft entry and printed copy of sequence tot it, name, g. B.F.Tack, 20-JUL-1987.
Polyadenylation signals are located at positions 481-486, 525-530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Cetartiodactyla, Ruminantia, Pecora, Bovidae,
Bovinae, Bos.
                                                                                                                                                                                                                                                                                                                                                                              Original source text: Bovine intestine epithelial cell, cDNA to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     304 TGGTGAGCCCAGCGATTAGCGAAAAGAAGCTCTGGAAAGCCCACTTTGCCGTCTCGACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACTAAAAAAAACATTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                / Match 36.2%; Score 434; DB 4; Length 604; Local Similarity 88.6%; Pred. No. 4.8e-82; nes 505; Conservative 0; Mismatches 60; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    64. .357
/note="calpactin I light chain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'product="calpactin I lc mRNA"
```

셤

유 ò

```
m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          401 GGGGGGGGGGGGGGGGGGGGGGCTTCCTTAGTACGTGCGGCGGCGGGTAG 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161 rerahactricicritcheragaaacecrecrecrecrecaaratri--aesecareceacec 104
                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
I (bases I to 400.
Harder, T., Kube, B. and Gerke, V.
Cloning and characterization of the human gene encoding pll: Geructural similarity to other members of the S-100 gene family 92241679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44
                                                                                                                                                                                                                                 source text: Homo sapiens (tissue library: lambda-FixII)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 461 CCTTGGCCGAGGCGCGGACGCTGGGCGAGCTGGGCGACGTGGGCGACGTGGGCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    103 TGACCTGCCCTTCCTCTCGGTTTGGTTTTAGAAAGTGTACAAATCAAAGAACCCGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 560 CCTTGGCCGAGGCGCGGAGGCGGACGCTGGGCGAGCTGGGCGAGC-----TGGACGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGAGGCGCGCGCGCAGCCGGAGGCCTCGCCGCCTCGGCAGGGCGCTCCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTGCCCTCGCTCCCGGACCCGCCTCGCAGAGGCCTCGCCCCCCCAGACAGCGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTAAACTICTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGCATCCCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    911 TGAGCCTGCCCTTCCTCTCGGGTTTTGGAAAGTGTACAAATCAAAGAACCCGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 389.2; DB 9;
Pred. No. 1.7e-72;
0; Mismatches 13;
                                                                                                                                                                                                                                                                                                         /mol_type="genomic_DNA"
/db_xref="texon:9606"
/cell_type="fibroblast"
/tissue_lib="lambda-FixII"
92. .402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="p11"
/note="beta-DRE element"
220. .227
                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="beta-DRE element"
176. .183
                                                                                                                                                                                                                                                                              1. .480
/organism="Homo sapiens"
    Human pll protein gene sequence.
                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                      /gene="p11"
92. .100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /gene="pl1"
395. .402
/gene="pl1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 32.5%;
Best Local Similarity 94.6%;
Matches 439; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="p11"
196. .203
                                               pll protein.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                      /gene="p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /gene="p11"
214. .223
                                 M77483.1 GI:189420
                                                                                                                                                                                                                      1533380
Original
                                                                                                                                                                                                                                                                                                                                                                                                    misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GC_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GC_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GC signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GC_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          851
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                      MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                            gene
                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRI 07-JAN-1995
                                                                                                                                           PAT 14-JUL-2003
                                                                                                                                                                                                                                                                                       Haferlach, T., Schoch, C., Kern, W., Kohlmann, A., Schnittger, S., Dugas, M., Elis, R., Brors, B. and Mergenthaler, S.
Novel genetic markers for leukemias
Novel genetic markers for leukemias
Patent: WO 0303943-A 43 15-MAY-2003,
Deutsches Krebsforschungszentrum (DE) ; Haferlach, Torsten,
PD Dr. (DE) ; Schoch, Claudia (DE) ; Kern, Wolfgang (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          126 ATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTCCTTCATTATTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCAGGGAA 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAG 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAA 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAA 485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCTTTTTTCCCCAGCGAA 76
    65
                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCCTTAAGCGACCTTT-GGACAACTCTTATCAGGAGGAGGAGCGAACTGCTCATTTCTGC
CTGCAAATTTGTGAAATGTGAACATCATGGTTTCCATGGCGTGCTCCATTTGAGACGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 423; DB 6; Length 434;
Pred. No. 1e-79;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                           linear
                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                               TITIGGIGICCGIIGAAGCCIIGGCCG 568
                                                   /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                    Sequence 43 from Patent WO03039443. AX777886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480 bp
                                                                                                                                                                                    AX777886.1 GI:32694880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGGTCCGTTGAAGC 560
                                                                                                                                                                                                                   sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GIGGICCGIIGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 99.8
Matches 434; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HUMP11A
                                                                                                                                                                                                                    Ношо
                                                                                                                                                                                                                                    Homo
                               539
                                                            64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15
                                                                                                    AX777886/c
LOCUS
                                                                                                                                                   DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 25
HUMP11A/c
LOCUS
                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
```

g

a

ઠ

g

ò

g

8

සු

ò

g

à

요 ò

ð

g ሯ

```
complement (<246. .>476)

Codon_arart=1

/product="similar to calpactin I light chain"
/protein_id="BAC56353.1"
/brotein_id="G1:28189324"
/translation="GDKGYLTREDRYLAMEKEFPGFLENQKDPLAVDKIMKDLDQCRD
GKVGFQSFFSLIAGLIALAGLIALAGLIAUMKQKGKK"
                                                                                                                                                                                                                                                                                                                                                                                                                       This work was performed to collaborate with Developmental Biology Department, National Institute of Agrobiological Sciences. Address: 2 Ikenodai, Tsukuba, Ibaraki, 305-8602 Japan. Phone & Fax: 81-29-838-8633 e-mail: kazuha@affrc.go.jp This work was funded by Organized Research Combination System (ORCS) project of Ministry of Education, Culture, Sports, Science and Technology.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tranchescrivarinaciriricirirchecircheaanesaginesarinarir 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122 TTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGG 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      302 TGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
                                                                                                                                                                                                      Tranjanco, G., Ishiwata, H., Katsuma, S., Kizaki, K., Patel, O.V., Nakano, H., Kono, T., Ushizawa, K., Takahashi, T., Imai, K., Hirasawa, A., Shiojima, S., Ikawa, H., Suzuki, Y., Izaike, Y., Todoroki, J. and Hashizume, K.
Direct Submission
Submitted (25-DEC-2002) Gozoh Tsujimoto, National Research Institute for Child Health and Development, Department of Molecular, Cell Pharmacology; 3-35-31 Taishido, Setagaya, Tokyo 154-6867, Japan (E-mail:gtsujimoto@nch.go.jp, Tel:81-3-3149-2476,
                                                    Ishiwata,H., Katsuma,S., Kizaki,K., Patel,O.V., Nakano,H.,
Takahashi,T., Imai,K., Hitasawa,A., Shiojima,S., Ikawa,H.,
Suzuki,Y., Tsujimoto,G., Izaike,Y., Todoroki,J. and Hashizume,K.
Characterization of gene expression profiles in early bovine
pregnancy using a custom cDNA microarray
Mol. Reprod. Dev. 65 (1), 9-18 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 GTACATTTTCTATGGGTCC-CATATGCTCA-GAAATCCTTATACAGGGGAAGCTGTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                239 CTGCCTACTTCCCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCATGCGATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5 CTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 534;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .534
/organism="Bos taurus"
/mol_type="mixNa"
/db_xref="taxon:9913"
/clone="ORCS13327"
/clone="ORCS1327"
/dev_stage="adult"
/note="mixture of uterus and placenta"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 31.2%; Score 374.2; DB 4 Best Local Similarity 86.0%; Pred. No. 2.7e-69; Matches 461; Conservative 0; Mismatches 69

    end partial sequence.
Location/Qualifiers

                  Bovinae; Bos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                  JOURNAL
MEDLINE
                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                            PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                    03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AB098817 534 bp mRNA linear MAM 12-APR-2003
Bos taurus mRNA for similar to calpactin I light chain, partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTCGG 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGT-GG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                       Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bos taurus
Bos taurus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                Bukaryota; Metazoa, Chordata, Craniata, Vertebrata, Butele
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                    PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 392;
                                                                                                                                                                                                                                                                                                                                       Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737-A 45565 12-SEP-2002;
                  1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                    Н
            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31.5%; Score 377.4; DB 6, 99.5%; Pred. No. 5.4e-70; ive 0; Mismatches 1,
                                                                                                                                        392 bp DNA Sequence 45565 from Patent WO02070737. CQ700639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCCAGGTCCTTCATTATTTTGTCCACAGCC 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTCCAGGTCCTTCATTATTTTGTCCACAGCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
/db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GI:28189323
                                                                                                                                                                                                                                                                                                                                                                                                     Chondrogene Inc. (CA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    clone: ORCS13327
                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 389; Conservative
                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AB098817.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AB098817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cds,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
DEFINITION
                                                                                                            RESULT 26
CQ700639/c
                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 27
AB098817
                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
```

8

g

ò

셤

ઠે

qq

ઠે

g

ઠે

요

ઠે

ò

g

ò

셤

ò 음

ò

```
/db_xref="taxon:10090"
/clone="MGC:36182 IMAGE:4949465"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="Vector: pCMV-SPORT6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Mus musculus"
/mol_type="mRNA"
/strain="FVB/N"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                           Mus musculus (house mouse)
Mus musculus
                                                                         BC025044
BC025044.1 GI:19263549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 604)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                           SOURCE
ORGANISM
     3C025044/c
                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
JOURNAL
                                                                         ACCESSION
                                                                                                                                                                                                 REFERENCE
                                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                           PAT 03-FEB-2004
                                                                                 CCAGGTCCTTCATTTTTGTCCACGGCCAGAGGTCTTTTTGATTTTCCAAAAATCCAG 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATTTCTGCCT 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                         GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTGTTAAGTAGCTTTTATC-CCCA 480
                                                                                                                                                            419 GGAACTCCTTTTCCATGAGTACTCTCAGGTCTTCCTTTTAAGTAACCTTTATCACCTG 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rcrggratttaactttrcrtrgcrtgcrtgrcaargagagttagartttrartrtracat 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTTATTTTTACAT 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATT 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCT 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          79
                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT 19
CCAGGTCCTTCATTTTTGTCCACAGGCCAGGGTCTTTTTGATTTTCCAAAAATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 AAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTICITICCCTICICCTICATGTGTNCTACAAATAGTCATTGCATGCAATGGTGAGGC
                                                                                                                                                                                               481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGG 536
                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 384;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Liew, C.C., Marshall, W.E. and Zhang, H.
Compositions and methods relating to osteoarthritis
Patent: WO 020707777-A 54057 12-SEP-2002;
Chondrogene Inc. (CA)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 363.6; DB 6; Length
Pred. No. 4.7e-67;
0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                       CQ709131
Sequence 54057 from Patent WO02070737,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                             CQ709131.1 GI:42269942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30.3%;
98.7%;
                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 30.3
Best Local Similarity 98.7
Matches 366; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTCATTATT 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTTCATTATT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               78
                    299
                                                                                        359
                                                                                                                           422
                                                                                                                                                                                                                                479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  368
                                                     362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18
                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                     CQ709131/c
                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        53
                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DRIGIN
                                                                                                                                                                                                                                                                                                                       LOCUS
```

임

ò 요 ð g ò g ò 요 g

ò

ò

/tissue_type="Mammary tumor. C3(1)-Tag model. Infiltrating detal darcinoma. 5 month old virgin mouse." /clone lib="NC1 CGAP_Mam6" /lab_host="DH10B" Center code: BCM-HGSC
Web site: http://www.hgsc.bcm.tmc.edu/cdna/
Contact: amg@bcm.tmc.edu
Gunaratne, P.H., Garcia, A.M., Lu, X., Hulyk, S.W., Loulseged, H.,
Kowis, C.R., Sneed, A.J., Martin, R.G., Muzny, D.M., Nanavati,
A.N., Gibbs, R.A. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 60 Row: g Column: 24
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 6677832. Submitted (05-MAR-2002) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, BC025044 604 bp mRNA linear ROD 29-JUN-; Mus musculus S100 calcium binding protein A10 (calpactin), mRNA (cDNA clone MGC:36182 IMAGE:4949465), complete cds. NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-remail.nih.gov
Tissue Procurement: Jeffrey Green M.D.
CDNA Library Preparation: Life Technologies, Inc.
DNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Baylor College of Medicine Human Genome
Sequencing Center

ä

9

```
PAT 11-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                        304 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 245
                                                                                                                                                                                                                                                                                                                                                                                                                                            TITACAITIGCIAAGIGTCCTGAICTGCICATGAAAICCTICIATGGGGGAAGCTGIGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTGCCTACTTCTTTCCCTTCTGCTTCATGTACTACAAAATAGTCATTGCATG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                              GGAACTAAAAAAGAACTTTATTTGAGG--CAAGGGATGCAAACAATACAAAATCAA 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCNNACTTTGCCATCTCTACACTGG 5
                                                                                                                                                                                                                                                                                                                                                                     61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                            GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ishikawa,K., Asai,S., Takahashi,Y., Nagata,T. and Ishii,Y. Method for examining ischemic conditions
Patent: WO 018818-A 919 22-NOV-2001;
School Juridical Person Nihon University (JP)
                                                                                                                                                                                                                                                         ..
7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23;
                                                                                                                                                                                                                     Length 365;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 600;
                                    osteoarthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                       . 9
                                                                                                                                                                                                                                                         4 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 28.7%; Score 343.6; DB 6; Best Local Similarity 79.6%; Pred. No. 9.2e-63; Matches 476; Conservative 0; Mismatches 99;
                                                                                                                                                                                                                     Score 344.8; DB 6
Pred. No. 4.8e-63;
0; Mismatches 4.
             Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to ost
Patent: WO 02070737-A 51172 12-SEP-2002;
Chondrogene Inc. (CA)
Location/Qualifiers
1. .365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="unassigned DNA" /db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX306168 600 bp
Sequence 919 from Patent WO0188188.
AX306168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
1. .600
/organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX306168.1 GI:17645451
                                                                                                                                                                                                                   Query Match 28.8%;
Best Local Similarity 98.4%;
Matches 358; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCA 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rcca 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus
                                                                                                                                                                                                                                                                                                                                362
                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 31
AX306168/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                 AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
REFERENCE
                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DRIGIN
                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                    /translation="MPSQMEHAMETMMLTFHRFAGDKDHLTKEDLRVLMEREFPGFLE
NQKDPLAVDKIMKDLDQCRDGKVGFQSFLSLVAGLTIACNDYFVVNMKQKGKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                         511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    123 TACATTIGCTAAGIGICCIGATCIGCICAIGAAAICCTICIAIGGGGGAAGCIGIGGGG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGATCCTTTTGATTTTCCAAAAACCCA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCTGGTAT----TTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  510 CTCTGCCATTGGATTAAGTTTTCTCTCTCAGATTGTTGAATTGGAGTTGGATCTCATTG 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGATICCTIAAGCGACCCTITGGGACAACTCTIAICAGGGAGGAGCGA--ACTGCTCAIT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAAAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGAGCCCCGCCACTAGTGATAGAAAGCTCTGGAAAGCCCACTTTGCCATCTCGGCACTGG 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGATTÓCTCAAGTGACCCCGTGGGTGAACACGCACCAGGGTGGGGGTACCAGTGCTCCAG 346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
Memo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAAACCTGTGAAACGTAAGCATCATGGTTTCCATGGCGTGCTCCATTTGGGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                    7 AAAAAAGAACTITATITATIGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         450 cacatrirctraaggerccrearcrecreaa------gaagcagregge
                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                22;
                                                                                                                                                                                                                                                                                                             DB 10; Length 604;
                                                                                                                                              protein A10"
                                                                                                                                                                                                                                                                                                             Score 348.8; DB 10; Length
Pred. No. 7.1e-64;
0; Mismatches 92; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGAG-AGTCTGTCGAACCTGGGCCCCGAAGCGCAGCA
                                                                                                                       /codon_start=1
/product="8100 calcium binding px
/protein_id="AAH25044.1"
/db_xref="GI:19263550"
/db_xref="LocusID:20194"
/db_xref="MGI:1339468"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CQ706246 365 bp DNA
Sequence 51172 from Patent WO02070737.
CQ706246
           /gene="S100a10"
/note="synonym: p11"
/db_xref="LocusID:20194"
                                                                 'db_xref="MGI:1339468"
                                                                                                     /gene="S100a10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CQ706246.1 GI:42267015
                                                                                                                                                                                                                                                                                                             Query Match
29.1%;
Best Local Similarity 80.3%;
Matches 466; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                         570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                             67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 30
CQ706246/c
LOCUS
gene
                                                                                      CDS
```

ద

ò 셤 8

ò g ð g ò

8 8 8 8 a 8 셤

용

8 용

ઠે

ŝ

8 6 8 6

유

```
/translation="MPSQMEHAMETMMLTFHRFAGDXDHLTKEDLRVLMEREFPGFLE NQKDPLAVDXIMKDLDQCRDGKVGFQSFLSLVAGLTIACNDYFVVNMKQKGKK" upstream of Ncol site; chromosome 3.
                                                                                                                                                                                                                   ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                        532
                                                                                                                                                                                                                                                                                                                            122
                                                                                                                                                                                                                                                                                                                                                                                                  182
                                                                                                                                                                                                                                                                                                                                                                                                                                  427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         186 GGAACTCCCGTTCCATGAGCACTCTCAGGTCCTTTGTCAAGTGGTCTTTGTCGCCTG 127
                                                                                                                                                                                                                                                                                                                                                               531 CTCTGCCATTGGATTAAGTTTTCTCTCTCAGATTGTTGAATTGGAGTTGGATCTCATTTG 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       246 CCAGGICCTICATTATTTTGTCCACAGCCAGAGGATCCTTTTGATTTTCCAAAAACCCAG 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 482 CGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTT 541
                                                                                                                                                                                                                                                       99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT
                                                                                                                                                                                                                                                                                          591 AAAAAAGGACTTTCTTTATTGAGGGCAATGGGATGCAAAACAATATAAAACTCAGAAGCTT
                                                                                                                                                                                                                                                                                                                             123 TACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                ------daadcagredec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGATTCCTTAAGCGACCCTTTGG-GACAACTCTTATCAGGGAGGAGGAACTGCTCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            242 CTGCCTACTTCCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  306 TGAGCCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTGCCATCTCGGCACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          422 GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               126 CAAACCIGIGAAACGIAAGCATCAIGGITITCCAIGGCGIGCICCAITIGGGAIGGCAIII
                                                                                                                                                                                                                                                       7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      542 TGGTGTGGTTCGTTGAAGCCTTGG--CCGAGGCGCGGCGGACGCTGGGCGAGCTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23;
                                                                                                                                                                                  600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             l Liew,C.C., Marshall,W.E. and Zhang,H. Compositions and methods relating to osteoarthritis Patent: WO 02070737-A 56053 12-SEP-2002; Chondrogene Inc. (CA)
                                                                                                                                                                                  Length
                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                  DB 10;
                                                                                                                                                                              Score 343.6; DB 10;
Pred. No. 9.2e-63;
0; Mismatches 99;
                                                                                                                                                                                                                                                                                                                                                                                                                     471 CACATTTCCTAAGGGTCCTGATCTGCTCACAA-----
 product="calpactin I lc mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       407 bp DNA Sequence 56053 from Patent WO02070737. CQ711127.1 GI:42271984
                  69. .362
/note="calpactin I light ch
/codon_start=1
/protein_id="AAA37363.1"
/db_xref="GI:309134"
                                                                                                                                                                              28.7%;
Local Similarity 79.6%;
hes 476; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                               ф
                                                                                                                                               91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 33
CQ711127/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PEATURES
                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                         ठ
                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mouse Calpactin I light chain (pll) mRNA, complete cds.
M16465 J02779
M16465.1 GI:192360
Calpactin I light chain; protein kinase; tyrosine kinase.
Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryotta, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus. 1 (bases 1 to 600)
Saris, C.J., Kristensen, T., D'Eustachio, P., Hicks, L.J., Noonan, D.J., Funter, T. and Tack, B.F.
CDNA sequence and tissue distribution of the mRNA for bovine and murine pll, the $100-related light chain of the protein-tyrosine kinase substrate p36 (calpactin I)
3. Biol. Chem. 262 (22), 10663-10671 (1987)
                                                                                                                                                                                                                             AGATTCCTCAAGTGACCCCGTGGTGAACACGCACCAGGGTGGGGGGGTACCAGTGCTCCAGT 367
                                                                                                                                                                                                                                                                                                                                                                                247
                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAGGTCCTTCATTATTTTGTCCACAGAGGATCCTTTTGATTTTCCAAAAACCCAG 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAACTCCTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATCCCCAG 481
                                                     ATCTGGTAT----TTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTT 122
                                                                                         CTCTGCCATTGGATTAAGTTTTCTCTCTCAGATTGTTGAATTGGAGTTGGATCTCATTTG 472
                                                                                                                                                              ------GAAGCAGTGGGGC 427
                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                        TGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT 361
                                                                                                                                                                                                                                                                                                                                                                                                                 CGAATTTGTGAAATGTAAACATCATGGTTTCCATGCCGTGTTCCATTTGAGATGGCATTT 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Original source text: Mouse fibroblast (ANN-1), cDNA to mRNA. Draft entry and clean copy sequence for [1] kindly provided by B.F.Tack, 20-UUL-1987. Calpactin I light chain mRNA levels are low in liver, heart and testes, moderate in brain, spleen and thymus, and high in kidney, intestine and lung. A polyadenylation signal is located at positions 572-577.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAACCTGTGAAACGTAAGCATCATGGTTTCCATGGCGTGCTCCATTTGGGGATGGCATTT 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10
                                                                                                                                                                                                                                                                                                                                                               TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGGGGC
                                                                                                                                                                                                 AGATTCCTTAAGCGACCCTTTGG-GACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATTT
                                                                                                                                                                                                                                                                        TGGTGTGGTCCGTTGAAGCCTTGG--CCGAGGCGCGGGCGGCGACGCTGGGCGACGTGGGC
                                                                                                                                                              cacatricciaaggiccigarcigcicacaa----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .600
/organism="Mus musculus"
/mol_type="mRNA"
/db_tref="taxon:10090"
1. .600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus
                                                                                                                                                                                                                                                                        242
                                                                                                                                                                                                                                                                                                           366
                    591
                                                     67
                                                                                         531
                                                                                                                                                              471
                                                                                                                                                                                                 183
                                                                                                                                                                                                                                    426
                                                                                                                                                                                                                                                                                                                                            302
                                                                                                                                                                                                                                                                                                                                                                              306
                                                                                                                                                                                                                                                                                                                                                                                                                 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                    246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 32
MUSCALPI/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
MEDLINE
PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
```

8 8 8

ò g ò g

qq ò 8 S

\$ 8 &

472

q

ઠે ద 8

8 S

ద ò ď 8 ą

g ઠે

```
Direct Submission

Bursets Submission

Bursets Submission

Research, 320 Charles Street, Cambridge, MA 02141, USA

Research, 320 Charles Street, Cambridge, MA 02141, USA

Si (bases 1 to 164679)

Birren, B., Linton, L., Nusbaum, C., Lander, E., Allen, N., Anderson, M., Baker, J., Baldwin, J., Barna, N., Beckerly, R., Benn, J., Brown, A., Coske, P., Calangelo, M., Collins, S., Collymore, A., Cooke, P., Dearellano, K., Degayre, E., Devon, K., Dewar, K., Donelan, L., Doyle, M., Perreira, P., FitzHugh, M., Forrest, C., Karatas, A., Lehoczky, J., Lieu, C., Locke, K., Macdonald, P., Karatas, A., Lehoczky, J., Lieu, C., Locke, K., Macdonald, P., Marquish, N., McEwaphilin, J., McGurk, A., McKrowyllin, D., Naylor, J., Niloff, M., O'Connor, T., O'Donnell, P., Pavilin, B., Peterson, K., Pollara, V., Riley, R., Roberts, D., Roy, A., Severy, P., Stange-Thomann, N., Stojanovic, N., Stone, C., Subramanian, A., Tesfaye, S., Torruella-Miller, I., Vassiliev, H., Vo, A., Wagner, A., Direct Submission

Submitted (O2-FEB-1999) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA

Research, 320 Charles Street, Cambridge, MA 02141, USA

Baker, J., Baldwin, J., Barna, N., Beckerly, R., Benn, J., Brown, M., Barer, J., Baldwin, J., Brown, M., Sprone, C., Lander, E., Allen, N., Conn, R., Baker, J., Brown, A., Brewerly, R., Benn, J., Brown, M., Sprone, C., Lander, E., Allen, N., Anderson, M., Barer, J., Barna, N., Reckerly, R., Benn, J., Brown, M., Sprone, C., Lander, E., Allen, N., Reckerly, R., Benn, J., Brown, M., Sprone, C., Lander, E., Allen, W., Sprone, C., Lander, E., Allen, J., Sprone, C., Sprone, C., Sprone, C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Signature of the state of the s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AC005921 164679 bp DNA linear PRI 03-JUN-1999
Homo sapiens chromosome 17, clone hRPK.294_J_22, complete sequence.
AC005921
                                                                                                                                                                           Homo sapiens (human)
Homo sapiens
Homo sapiens
Eukaryota, Metazoa; Chordata, Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases I to 164679)
Birren, B., Linton, L., Nusbaum, C. and Lander, E.
Homo sapiens chromosome 17, clone hRPK.294_J_22
                                                                                                                                                                                                                                                                                                                                            99 AAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTT 40
                                                     219 ATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCGGGAAGCCCACTTTGCCATCTC
       ATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGGAAGCCCCACTTTGCCATCTC
                                                                                                                                       TACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                TATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTT 511
                                                                                                                                                                                                                                                                                                                                                                                                                                                TATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AC005921.3 GI:4982556
       293
                                                                                                                                       353
                                                                                                                                                                                                                                                                           413
                                                                                                                                                                                                                                                                                                                                                                                                                473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AC005921
LOCUS
                                                  g
                                                                                                                                                                                         a
                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                                                                                                                                              용
                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                               GCAGATICCTIAAGCGACCCTIGGGACAACTCTIATCAGGGAGGGAGGGAACTGCICAIT 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAAC 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            339 GCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAAC 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               287 ITTACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGAGGCCCGCAATTAGGG-AAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGAGGCCCGCAATTAGGGAAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTG 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                        3 AACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAAAC--AATACAAAATCAA
                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Gaps
                                                                                                                                                                                                                                               4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 6; Length 339;
                                                                                                                                                                28.6%; Score 343; DB 6; Length 407; 98.7%; Pred. No. 1.2e-62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Liew,C.C., Marshall,W.E. and Zhang,H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737-A 16039 12-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 337.4; DB 6,
Pred. No. 1.8e-61;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CQ671113 339 bp DNA Sequence 16039 from Patent WO02070737.
                                                                                                                                                                                                                                        0; Mismatches
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Oualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCCA-GGTCCTTCATTATTT 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GICCAGGGICCTICATTANTT 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CQ671113.1 GI:42164059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 99.7%;
Matches 338; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chondrogene Inc. (CA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                    Best Local Similarity 98.7
Matches 377; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            47
                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 34
CQ671113/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
```

셤 ò a

ઠ

```
repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                             repeat_region
                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                        Direct Submission

Submitted (Ja-APR-1999) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA

E S (Dasses 1 to 164679)

E S (Dasses 1 to 164679)

Barren, B. Linton, L., Nusbaum, C., Lander, E., Allen, N., Anderson, M., Baker, J., Baldwin, J., Barna, N., Beckerly, R., Benn, J., Brown, A., Cooke, P., Dearllano, K., Depayre, E., Devon, K., Dewar, K., Donelan, L., Doyle, M., Ferreira, P., Fitzhiugh, W., Forrest, C., Funke, R., Gage, D., Galagan, J., Gardyna, S., Gilbert, D., Grant, G., Raretss, A., Lehoczky, J., Hagos, B., Hadford, A., Horton, L., Howland, J.C., Jones, C., Kann, L., Karatss, A., Lehoczky, J., Lien, C., Locke, K., Macdonald, P., Marquis, N., McEwan, P., McGurk, A., McKernan, K., McLaughlin, J., Malloff, M., O'Connor, T., O'Donnell, P., Pavlin, B., Peterson, K., Pollaraw, V., Rilley, R., Scherts, D., Roy, A., Severy, P., Stange-Thomann, N., Stojanovic, N., Stone, C., Subramanian, A., Tesfaye, S., Torruella-Miller, I., Vassiliev, H., Vo, A., Wagner, A., Wheeler, J., Wu, X., Wyman, D., Ye, W.J. and Zody, M.
Castle, A., Cerny, J., Colangelo, M., Collins, S., Collymore, A., Cooke, P., DeArellano, K., Depayre, E., Devon, K., Dewar, K., Donelan, L., Doyle, M., Perreira, P., Fizhugh, W., Porrest, C., Funke, R., Gage, D., Galagan, J., Gardyna, S., Gilbert, D., Grant, G., Karaes, B., Heaford, A., Horton, L., Howland, J. C., Jones, C., Kann, L., Karaes, A., Lehoczky, J., Lieu, C., Locke, K., Macdonald, P., Marquis, N., McEwan, P., McGruk, A., McKernan, K., McLaughlin, J., Maldim, J., Molla, M., Morris, W., Morrow, J., Mychaleckyj, J., Peterson, K., Pollara, V., Kiley, R., Roberts, D., Roy, A., Severy, P., Stange-Thomann, N., Stojanovic, N., Stone, C., Subramanian, A., Tesfaye, S., Torruella Miller, I., Vassiliev, H., Vo, A., Magner, A., Wheeler, J., Wu, X., Wman, D., Ye, W.J. and Zody, M., A., Magner, A., Direct, Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Only the last 164679 base pairs of this clone are being submitted. The remainder overlaps accession number AC004590 (WICGR project L314).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (03-JUN-1999) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA On Jun 3, 1999 this sequence version replaced gi:4582484.
All repeats were identified using RepeatMasker: Smit, A.F.A. & Green, P. (1996-1997)
http://ftp.genome.washington.edu/RM/RepeatMasker.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="hRPK.294_J_22"
/clone_lib="RPCI-11 human BAC library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        complement (3209. 3496)
/rpt family="AluJo"
complement (3506. 3797)
/rpt_family="AluSx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol type="genomic DNA"
/db_xref="taxon:9606"
/chromosome="17"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /rpt_family="L1MB2"
4416. .4699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2063. .2209
rpt_family="C-rich"
complement (3018. .3085)
rpt_family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rpt_family="L2"
54. 645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rpt_family="CT-rich"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /rpt_family="L2"
complement(199. .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           repeat_region
                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
```

```
/rpt_family="L2"
14209. 14503
/rpt_family="AluSg"
14504. 15534
/rpt_family="L2"
complement(15533. 15697)
/rpt_family="MER45"
15710. 16274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         complement [18849. .19152)
/rpt_family="MER33"
19153. .19186
/rpt_family="MIR"
1921. .19264
/rpt_family="CT-rich"
19330. .19620
                                                                    /rpt_family="Alusx"
complement (5438. 5651)
/rpt_family="MSTC"
complement (5633. 5838)
/rnt_family="MSTC"
                                                                                                                                                                                                                                                                                                                                                                                                            /rpt_family="AluSx"
complement(12758. ,12815)
/rpt_family="MER5A"
                                                                                                                                                                                                                                                                                                                                                                                                                                          /rpt_family="MER5A"
12816. .12981
/rpt_family="MER5A"
complement(13422. .13798)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /rpt_family="(TTTC)n"
complement (7496. 7777)
/rpt_family="Alusc"
complement (7896. 8002)
/rpt_family="L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /rpt_family="AluJo/FRAM"
complement(18420..18615)
/rpt_family="MIR"
/rpt_family="Aluca
complement(4700. .4884)
/rpt_family="LiMB2"
                                                                                                                             /rpt_family="L1MB2"
5994. .6301
                                             complement (4888. .5118) /rpt_family="MSTC"
                                                                                                                                                                                                                                                                                            /rpt_family="AluSg"
complement(8522..8576)
/rpt_family="MIR"
10158..10261
                                                                                                                                                                                                                                                                              complement (8215. .8513)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 family="(CAAAA)n"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /rpt family-
22172. .22333
/rpt_family="AluSx"
/rpt_family="AluSx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10340. .16636
/rpt_family="AluJo"
16638. .16707
                                                                                                                                                                         /rpt_family="AluSx"
7317. .7495
                                                                                                                                                                                                                                                                                                                                                                                 'rpt family="Alusx"
.2057. .12353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     . .22141
family="AluSx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /rpt_family="Alusx"
22344. .22615
/rpt_family="Alusx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                family="Aluy"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /rpt_family="L2"
16340. .1662/
                                                                                                                                                                                                                                                                                                                                                    /rpt_family="MIR"
complement(10325.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                family="MIR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rpt_family="MIR"
2021. .22141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /rpt_family="MIR
complement(18849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .18848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /rpt_fa
22142.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'rpt_fa
.8748.
                                              repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            repeat_region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                repeat_region
```

g

ઠે g 8 В 8 8 δ q

요 ò g

ઠે

g

8 g δ

ઠે

a

ò

```
4
                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 17-JUL-2003
                                                                                158
                                                                                                 330 CAAATGAGAGTTAGATTTTATTTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATC 271
                                                                                                                                                             218
                                                                                                                                                                                                                                                                                                                                                                                                        CACTITGCCATCICTACACTGGTCCAGGTCCTTCATTATTTGTCCAGGGCCAGAGGGTC 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ն
                                                                                                                                                                                    270 CTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATC 211
                                                                                                                                                                                                                                           219 AGGGAGGAGCGAACTGCTCATTTCTGCTACTTCTTTTCCCTTCTGCTTCATGTGTACTAC 278
                                                                                                                                                                                                                                                                210 AGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTAC 151
                                                                                                                                                                                                                                                                                                                            AAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCC 338
                                                                                                                                                                                                                                                                                                                                                                  16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OS Rattus sp. (rat)
PN JP 2002530104-A/34
PD 17-SEP-2002
PF 19-NOV-1999 JP 2000583959
PR 20-NOV-1999 US 60/109333,25-NOV-1998 US 60/110033 PR 30-NOV-1999 US 60/110033 PR 30-NOV-1999 US 09/298731 PR 09-JUL-1999 US 09/298731 PR 21-SEP-1999 US 09/399913,21-SEP-1999 US 09/356014,09-JUL-1999 US 09/36014,0P-JUL-1999 US 09/400492 PI KENNETH RHODES, MARIA BETTY, HUAI PING LING, WENQIAN AN PC CINNIS/09, AGIX31/711, AGIK38/00, AGIK45/00, AGIP25/00, PC AGIP25/08, PC AGIP25/08, PC AGIP25/08, PC AGIP25/08, PC AGIP23/00, CO7K14/47, CO7K16/18, C12N5/10, C12P21/02, C12Q1/68,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A61P43/00, C07K14/47, C07K16/18, C12N5/10, C12P21/02, C12Q1/68,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PR
                                                                                                                                                                                                                                                                                                                                                 CAAATGAGAGTTAGATTTTTATTTTTACATTTGCTAAGTGTCCTGATCTCTCATGAAATC
                                                                                                                                                               CTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATC
                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rhodes,K., Betty,M., Ling,H.P. and An,W.
Cotassium channel interactors and uses therefor
Patent: JP 202530104-A 34 17-SEP-2002;
MILLENNIUM PHARMACEUTICALS INC,AMERICAN HOME PRODUCTS CORP
                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PC G01N13/53,G01N13/566,C12N15/00,C12N5/00,A61K37/02 Potassium channel interactors and uses therefor FH Ke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 600;
  Length 330;
                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600 bp DNA linea Potassium channel interactors and uses therefor. BD251901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 27.5%; Score 329.8; DB 6; Best Local Similarity 77.8%; Pred. No. 8e-60; Matches 458; Conservative 0; Mismatches 107;
27.5%; Score 330; DB 6; L
ilarity 100.0%; Pred. No. 6.8e-60;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITITGATITICCAAAAATCCAGGGAACTC 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITITIGATITICCAAAAATCCAGGGAACIC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (52). .(336)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .600
/organism="Rattus sp."
/mol_type="genomic DNA"
/db_xref="taxon:10118"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD251901.1 GI:33061671 JP 2002530104-A/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
FT CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to 600)
Query Match
Best Local Similarity
Matches 330; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              G01N33/53
                                                                                                                                                                                                                                                                                                                              279
                                                                                66
                                                                                                                                                               159
                                                                                                                                                                                                                                                                                                                                                                                                            339
                                                                                                                                                                                                                                                                                                                                                                                                                                                     90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 37
BD251901/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                g
                                                                                                                                                             ò
                                                                                                                                                                                                   g
                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                       130543 AAAAAGGATGTGTCAATTGAGGCCAAGAGGATGCAAACAATCCAAAGACCAAAAGCCTAT 130602
                                                                                                                                                                                                                                                                                                         130719
                                                                                                                                                                                                                                                                                                                                                                      CTATAGCGACTCTTTGGGAGAACTCTCACAGGGCTG--AGTAATTGCTTAGTTCTGCCTG 130777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      130837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         130898 CTTCATTGTTATGTCTGCAGCCAGAGGGTCTTTTTGATTCTCCAAAATCCAAGGAACTC 130957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       130958 CTTTCCCATGAGTACTTTCAGGCCCTCCTTCATTAAGTAGCCTTTATCCCCGGCAAATCT 131017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4,
                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 03-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                               308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              605
                                                                                                     68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                        130662 TTCT--TGGCCCTGGTCTGCTCATGAAAGCCTTCTACAGGGGAAGCTGTGGGCAGGTTC
                                                                                                                                                                                                                                                                                                                                                 CTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTCGTTCCCTTCTGCTTCATAGGTACTACAAAATAGTTGTTGTTGTCCACAGTGGTGAGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | TCATTATTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTC
                                                                                                                                                                                  CTGGTATTTAACTTTTCTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTACATT
                                                                                                                                                                                                                                                                TGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCCAGATTC
                                                                                                                                                                                                                                                                                                                                                                                                                               CTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCATGCTGAGGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              549 GTCCGTTGAAGCCTTGGC---CGAGGCGCGGCGACGCTGGGCGAGCTGGCCGAGCTGGA
                                                                                                   9 AAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTTAT
                                                             Gaps
                       Length 164679;
                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Liew, C.C., Marshall, W.E. and Zhang, H.
Compositions and methods relating to osteoarthritis
Patent: WO 02070737A 56710 12-SEP-2002;
Chondrogene Inc. (CA)
Location/Qualifiers
                   Score 330.8; DB 9; Length
Pred. No. 9.1e-60;
0; Mismatches 142; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CQ711784 330 bp DNA
Sequence 56710 from Patent WO02070737.
CQ711784 GI:42272641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .330
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   131138 cccrccccaaccac 131151
                     Query Match 27.6%;
Best Local Similarity 75.6%;
Matches 464; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGCGGGGCGGAGAG 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               909
                                                                                                                                                                                  69
                                                                                                                                                                                                                                                                129
                                                                                                                                                                                                                                                                                                                                                 189
                                                                                                                                                                                                                                                                                                                                                                                       130720
                                                                                                                                                                                                                                                                                                                                                                                                                                  249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      130838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        130778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      131018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 36
CQ711784/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
```

g

8 8

g

ਨੇ

8 8

8 6 8 6

8 6

ò g g ò g

ઠ

```
PAT 20-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4
                              182
                                                             405
                                                                                               242
                                                                                                                              349
                                                                                                                                                              302
                                                                                                                                                                                             289
                                                                                                                                                                                                                            362
                                                                                                                                                                                                                                                            229
                                                                                                                                                                                                                                                                                             422
                                                                                                                                                                                                                                                                                                               228 CAGGICTITCATIAITITGICCACAGAGGGICCTITIGAITITCCAAAAACCCAGG 169
                                                                                                                                                                                                                                                                                                                                                            482
                                                                                                                                                                                                                                                                                                                                                                                          109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         509 CTCTGTCATTGGATTAACTTTTCTTTCTTCTGCTTGTCGAATTGGAGTTGGATGTATTTG 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       405
509 CTCTGTCATTGGATTAACTTTTCTTTTCTCTGCTTGTCGAATTGGAGTTGGATGTTATTTG 450
                                                                                                                                                                                                                                                                                                                                                                                                                             542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                           49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                  168 GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTAGTTTTTTTCCCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           449 CACATTTCCTAAGGGTCCTGATCTGCTCA-------CAGGAAGCAGTGGGGGC
                              123 TACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                             ----caggaagcagreege
                                                                                             AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC
                                                                                                                                                              GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                            288 GAGCCCCCCACTAGTGATAGAAGCTCTGGAAGCCCACTTTTCCATCTCGCACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                              108 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT
                                                                                                                                                                                                                                                                                              CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                             483 GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        123 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                                                                                                                                                                                                                                                                                                                            423 GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            543 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAG 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCTTTGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.

1 (bases 1 to 600)

Rhodes,K., Betty,M., Ling,H.-P. and An,W.
Potassium channel interactors and uses therefor
Patent: US 6689581-A 64 10-FEB-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 27.5%; Score 329.8; DB 6; Best Local Similarity 77.8%; Pred. No. 8e-60; Matches 458; Conservative 0; Mismatches 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR473726 600 bp
Seguence 64 from patent US 6689581.
AR473726
                                                 449 CACATTTCCTAAGGGTCCTGATCTGCTCA-

    600
    organism="unknown"
    /mol_type="genomic DNA"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR473726.1 GI:42712140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown
                                                                                             183
                                                                                                                                                                                                                                                                                              363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        183
                                                                                                                                                                                                                            303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 39
AR473726/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                        요
                                                                                                                    8
                                                                                                                                                                                        g
                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                       ò
                                                                                          ठे
                                                                                                                                                           8
                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAAACTCGAAAGGTC 510
                                                                              122
                                                                                             CTCTGTCATTGGATTAACTTTTCTTTCTCTGCTTGTCGAATTGGAGTTGGATGTTATTTG 450
                                                                                                                                                                              405
                                                                                                                                                                                                                                             349
                                                                                                                                                                                                                                                                           302
                                                                                                                                                                                                                                                                                                            289
                                                                                                                                                                                                                                                                                                                                            362
                                                                                                                                                                                                                                                                                                                                                                         229
                                                                                                                                                                                                                                                                                                                                                                                                             422
                                                                                                                                                                                                                                                                                                                                                                                                                           CAGGTCTTTCATTATTTTGTCCACAGCCAGAGGTCCTTTTGATTTTCCAAAAACCCAGG 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122
                                                                                                                                          123 TACATTIGCTAAGTGTCTGTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGG 182
                                                                                                                                                                                                           AGATICCTIAAGCGACCCTITGGGACAACTCTIATCAGGGAGGAGCGAACTGCTCATITC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99
                                                                                                                                                                                                                                                                          67 AICIGGTAI ----TIAACTITICTITICTCIGCTIGICAAAIGAGAGTIAGATTITATITI
                                                                            ATCTGGTAT --- TTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTT
                                                                                                                                                                     449 CACATTTCCTAAGGGTCCTGATCTGCTCA------CAGGAAGCAGTGGGGGC
                                                                                                                                                                                                                                         AGATTCCTCAGTTGACCCCATGGGAGAGGACGCATCAAGGTGTGGGTACCAGGGC----T
                                                                                                                                                                                                                                                                                                          GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                                                                                                                                         GAGCCCCCCACTAGTAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                            CAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             108 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT
             AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          483 GAATTIGIGAAAIGIAAACAICAIGGITIICCAIGGCGIGIICCAITIGAGAIGGCAITII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 600)
Rhodes,K., Betty,M., Ling,H.-P. and An,W.
Nucleic acid molecules encoding potassium channel interactors uses therefor
Patent: 13631971-A 64 26-MAR-2002;
Location/Qualifiers
1...600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           543 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAG 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCTTTGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 329.8; DB 6; Length 6
Pred. No. 8e-60;
0; Mismatches 107; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600 bp
US 6361971.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64 from patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR202142.1 GI:20256681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tch 27.5%; al Similarity 77.8%; 458; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR202142
Sequence (
AR202142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                         288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 458
             7
                                            569
                                                                            67
                                                                                                             509
                                                                                                                                                                                                                                         404
                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                                                                          363
                                                                                                                                                                                                                                                                                                                                                                                                                                          228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        48
                                                                                                                                                                                                           183
                                                                                                                                                                                                                                                                                                                                           303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 38
AR202142/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
```

a

8

ò

362 229 422 109 542

49

302

242

ያ ያ

음 성 음

8 6

중 음

8 8

염 ઠે

```
PAT 06-JUN-2002
                                                                                                                                                                                                                                          444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      242
                                                                                                                                                                                                                                                                                            GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67 ATCTGGTAT----TTAACTTTTCTTTGTCAAATGAGAGTTAGATTTTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rattus norvegicus (Norway rat)
Rattus norvegicus
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                           GAGCCCCCCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                                                                                                                                              404 AGÁTTCCTCAGTTGACCCCATGGGAGAGGACGCATCAAGGTGTGGGTACCAGGGC---T
                                                                                                                                                                                                                         CAGGICCTICATIATITIGICCACAGCCAGAGGGICTITITIGATITICCAAAAATCCAGG
                       GAACTCCCTTTCCATGAGCACTCTCAGGTCCTTCTTGTCAAGTAGTTTTTTTCCCCTGC
                                                                                       GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                503 CTCTGTCATTGGATTAACTTTTCTTTCTCTGCTTGTCGAATTGGAGTTGGATGTTATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   123 TACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     --CAGGAAGCAGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24;
                                                                                                                                                                                                                                                                                                                                                                                                                                   591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mendrick, D., Porter, M.W., Johnson, K.R., Castle, A.L., Blashoff, M.R.
Molecular toxicology modeling
Patent: WO 0210453-A 1374 07-FEB-2002;
Gene Logic, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCTTTGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGGACGCTGGGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Rattus norvegicus"
Mol Lype="unassigned DNA"
/db xref="taxon:10116"
/noTe="EMBL/GenBank Accession No. J03627"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27.5%; Score 329.2; DB 6;
llarity 78.2%; Pred. No. 1.1e-59;
Conservative 0; Mismatches 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     443 CACATTICCTAAGGGICCTGATCTGCTCA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX401698 573 bp DN Sequence 1374 from Patent WO0210453. AX401698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX4.01698.1 GI:21337878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
tes 455; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus.
                                                                                                                                                                                                                           363
                     183
                                                                                       243
                                                                                                                                                       303
                                                                                                                                                                                         288
                                                                                                                                                                                                                                                           228
                                                                                                                                                                                                                                                                                             423
                                                                                                                                                                                                                                                                                                                              168
                                                                                                                                                                                                                                                                                                                                                                                                                                   543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX401698/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                     8 6
                                                                                                           8
                                                                                                                                                à
                                                                                                                                                                               셤
                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                           õ
                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                            용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /protein id="CAD35214.1"
/db_xref="GI:21440004"
/translation="MPSQMEHAMETMMLTFHRFAGEKNYLTKEDLRVLMEREFPGFLE
NQKDPLAVDKIMKDLDQCRDGKVGFQSFLSLVAGLIIACNDYFVVHMKQKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-JUN-2002
                                                   CCAGTIGGCCTACTICTICTICTICATGTACTACAAATAGTCATTGCATGCAATGAT 289
                                                                                                  GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                       GAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                                                                                                                                                                                                                                                                                             542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAAAAGACTTTCTTTATTGAGGGGAACCGGATGCAAACAACAATATAAAAACTCGAAAGGTC 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCTGTCATTGGATTAACTTTTCTTTTCTTGTGGGAATTGGAGTTGGAGTTATTTG 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACATITCCIAAGGCCCTGATCTGCTCA-----CAGGAAGCAGTGGGGC 405
AGATTCCTCAGTTGACCCCATGGGAGGACGCATCAAGGTGTGGGTACCAGGGC----T 349
                                                                                                                                                                      CAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                           228 CAGGICTITCATIAITITGICCACAGCCAGAGGGTCCTTTGATTTTCCAAAAACCCAGG 169
                                                                                                                                                                                                                                                           GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCTTTGTCAAGTAGTTTTTTTCCCCTGC 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                67 ATCTGGTAT----TTAACTTTTCTTTCTCTGTCAAATGAGAGTTAGATTTTTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  123 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC 182
                                                                                                                                                                                                                                                                                                                                            49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                              108 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT
                                 GAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGATGCAAACAATACAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT
                                                                                                                                                                                                                                                                                                                                                                                 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCTTTGGAAG
                                                                                                                                                                                                                                                                                                                                                                              GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGGCGGCGGACGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27.5%; Score 329.8; DB 6; Length (larity 77.8%; Pred. No. 8e-60; Conservative 0; Mismatches 107; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rhodes, K., Betty, M., Ling, H.P. and An, W.
Potassium channel interactors and uses therefor
Patent: WO 0226984.A 64 04-APR-2002;
Millennium Pharmaceuticals, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .600
/organism="Rattus sp."
/mol type="unassigned DNA"
/db_xref="taxon:10118"
/note="unnamed protein product"
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX407293 600 bp
Sequence 64 from Patent W00226984.
AX407293.1 GI:21440003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          al Similarity
458; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rattus sp.
Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rattus.
                                   243
                                                                   348
                                                                                                    303
                                                                                                                                      288
                                                                                                                                                                                                                                                                          168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                569
                                                                                                                                                                       363
                                                                                                                                                                                                                                        423
                                                                                                                                                                                                                                                                                                                                                                              543
                                                                                                                                                                                                                                                                                                                                                                                                                48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 40
AX407293/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
```

504

셤

ઠે

8 8 ઠે a

ద

ò g ò a

셤 ð

ò

g

유 ò g

ò

```
/translation="MPSQWEHAMETWMLTFHRFAGEKNYLTKEDLRVLMEREFPGFLE NOKOPLAYDKIMKOKK" UPStream of PstI site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ROD 27-APR-1993
42C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Original source text: Rat adrenal pheochromocytoma nerve growth factor-induced cell line PC12, cDNA to mRNA, clone 42C.
Draft entry and computer-readable sequence for [1] kindly provided by P.Masiakowski, 04-74N-1988.

Location/Qualifiers
                                          242
                                                                                                                 302
                                                                                                                                                    283
                                                                                                                                                                                         362
                                                                                                                                                                                                                           223
                                                                                                                                                                                                                                                                422
     ---CAGGAAGCAGTGGGGC 399
                                                                                                                                                                                                                                                                                                   163
                                                                                                                                                                                                                                                                                                                                         482
                                                                                                                                                                                                                                                                                                                                                                            162 GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTAGTTTTTTTCCCCTGC 103
                                                                                                                                                                                                                                                                                                                                                                                                                542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             t
                                                                                                                                                                                                                                                                                                                                                                                                                                                   43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                        183 AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC
                                                                                                                                                                                                            222 CAGGICTITCATIAITITGICCACAGGCAGAGGGICCTITIGAITITCCAAAAACCCAGG
                                                                   398 AGAITCCTCAGITGACCCCAIGGAGAGACGACCAICAAGGIGIGGGACCAGGGC---I
                                                                                                                 342 CCAGTIGGCCTACTICTICTICAIGIGTACTACAAAATAGICATIGCAAIGAAT
                                                                                                                                                                                         GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTTACACTGGTC
                                                                                                                                                                                                                                                                  CAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                           GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                    102 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             related
                                                                                                                                                                                                                                                                                                                                                                                                                  483 GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tobases 1 to 573)
Masiakowski, P. and Shooter, E.M.
Masiakowski, P. and Shooter, E.M.
Nerve growth factor induces the genes for two proteins
family of calcium-landing proteins in PC12 cells
Proc. Natl. Acad. Sci. U.S.A. 85 (4), 1277-1281 (1988)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 329.2; DB 10; Length 573; Pred. No. 1.1e-59; 0; Mismatches 103; Indels 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      complete cds, clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          543 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGCGGACGCT 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S-100-related protein; calcium-binding protein.
Rattus norvegicus (Norway rat)
Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /product="S-100-related protein mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA
   443 CACATITCCTAAGGGICCTGAICTGCICA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Rattus norvegicus"
/mol_type="mRNA"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="S-100-related protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /codon_start=1
/protein_id="AAA42097.1"
/db_xref="G1:206828"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rat S-100 related protein mRNA, J03627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         J03627.1 GI:206827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 78.2
Matches 455; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88125019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      342249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           đq
                                                                                                                                                                                         303
                                                                                                                                                                                                                                                                363
                                                                                                                                                                                                                                                                                                                                           423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 43
RATS100RP/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PUBMED
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                     유
                                                                                                                                            셤
                                                                                                                                                                                       ठे
                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                ð
                                                                                                             ò
                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /protein_id="CAD88529.1"
| Dackein=id::29786756"
| translation="WRSQMEHRATMMLTFHRPAGEKNYLTKEDLRVLMEREFPGFLE
NQKDPLAVDKIMKDLDQCRDGKVGFQSFLSLVAGLIIACNDYFVVHMKQKK"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 10-APR-2003
                                                                                                                                   362
                                                           302
                                                                                                                                                                                                            422
                                                                                                                                                                                                                             CAGGICITICATIAITITGICCACAGCCAGAGGGICCTITIGATITICCAAAAACCCAGG 163
                                                                                                                                                                                                                                                                                   482
                                                                                                                                                                                                                                                                                                      GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTAGTTTTTTCCCCTGC 103
                                                                                                                                                                                                                                                                                                                                                          542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          503 CTCTGTCATTGGATTAACTTTTCTTTCTTCGTCGAATTGGAGTTGGATGTTATTTG 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              123 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGG 182
                       343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGCCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99
                                                                                                                                                                                                                                                                                                                                                                                               43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT
                                                         GAGGCCCGCAATTAGGGAAAAAAAGCTCTGGAAGCCCACTTTGCCCATCTCTACACTGGTC
                                                                                                                                                                                                          CAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                          483 GAATTIGIGAAAIGIAAACAICAIGGIIIICCAIGGCGIGIICCAITIGAGAIGGCAITIT
                                                                                                                                                                                                                                                                                 GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Okuse, K., Baker, M., Poon, L., Wood, J.N. and Malik-Hall, M. Sodium channel regulators and modulators
Patent: WO 03016917-A 3 27-FEB-2003;
UNIVERSITY COLLEGE LONDON (GB)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27.5%; Score 329.2; DB 6; Length Elarity 78.2%; Pred. No. 1.1e-59; Conservative 0; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                  543 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGACGCT 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCCCTGCAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA

    .573
/organism="Rattus norvegicus"
/mol_type="unassigned DNA"
/db_xref="taxon:10116"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3 from Patent WO03016917.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX710160.1 GI:29786755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rattus norvegicus
Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          455;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        67
                                                                                                                                                                   282
                                                                                                                                                                                                          363
                                                                                                                                                                                                                                             222
                                                                                                                                                                                                                                                                                 423
                                                                                                                                                                                                                                                                                                                      162
                                                                                                                                                                                                                                                                                                                                                                                               102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ^
                                                         243
                                                                                                                                 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX710160/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DRIGIN
```

qq

ठ

g ò

	Qy 123 TACATTTGCTAAGTGTCCTGATCTGCTAGAAATCCTTCTATGGGAAGCTGTGGGG 182	Qy 183 AGATTCCTTAAGGGACCATTTGGGACAGAGGGGGGGGGG	Qy 243 IGCCIACTICTCTCTTCTGCTTCATGTGCTACAAAAIAGTCATTGCATGCAAIGGT 302	Db 340 CCAGTTGGCTTCTTCTTGGTTCATGTGTACTACAAATAGTCATTGCATGCA	Db 280 GAGCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC 221 Qy 363 CAGGTCCTTCATTATTTGTCCACAGGCCAGAGGCTTTTTGATTTTCCAAAAATCCAGG 422	220	Qy 423 GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCTCTTTATCCCCAGC 482	483 GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT	Db 100 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCAT		45 5/c AX260435 ION Sequence 86 ON AX260435	-	REFERENCE 1 - AUTHORS Meagher, M.J., Xu,J. and King,G.E. TITLE Compositions and methods for therapy and diagnosis of colon cancer JOURNAL Patent: WO 0173027-A 86 04-OCT-2001;	CORIXA CORPÓMITION (US) FEATURES Location/Qualifiers source 1318 /organism="Homo sapiens"	/mol_type="unassigned DNA" /db_xref="taxon:9606" ORIGIN	Query Match 26.4%; Score 317; DB 6; Length 318; Best Local Similarity 100.0%; Pred. No. 4e-57; Matches 317; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	Oy 35 GGGGÄTGCAAACAAAACCAAAAGCTTATCTGGTATTTAACTTTTCTTTGC 94 . Db 317 GGGGATGCAAACAATACAAAATCAAAAGCTTATCTGGGTATTTAACTTTTCTTTC	Qy 95 TIGICAAATGAGATTAGATTTTATTTTACATTTGCTAAGTGTCCTGATCTGCTCATGA 154 Db 257 TIGICAAATGAGAGTTAGATTTTATTTTTACATTTGCTAAGTGTCCTGATCTGCTCATGA 198	Oy 155 AATCCTTCTATOGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCTTTGGGACAACTCT 214
7 AAAAAGAACTTTATTGAGGGGAAGGGGATGCAAACAATACAAAAATCAAAAGCTT	Db 563 AAAAAAGCTTTCTTTATTGAGGGGAACGGATGCAAACAATATAAAACTCGAAAGCTC 504 Oy 67 ATCTGGTATTTAACTTTTCTTTCTTGTGTATGAGAGGTTAGATTTTATTT 122	Db 503 CTGTCATGGATTACTTTCTTTCTTTCTTCGGATTGGATT	Db 443 CACATTCCTAAGGGTCCTGATCTGCTCACAGGAAGCAGTGGGGGC 399	Qy 183 AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGG	QY 243 TGCCTACTTCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCATGCA	OY 303 GAGGCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC 362	Db 282 GAGCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC 223	222 CAGGICTITICATIATITIGICCACAGCCAGAGGGICCTITIGATITICCAAAAACCCAGG	Qy 423 GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC 482 Db 162 GAACTCCTTTCCATGAGCACTCTCAGGTCCTTTGTCAAGTAGTTTTTTTCCCTGC 103	Oy 483 GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGACATTTT 542 Db 102 AAACCTGTGAAATGTAACATCATGGTTTCCATGGCATTTT 43	543 GGTGTGGTCGTTGAAGCCTTGGCCGAGGCGCGGACGCT 584 	44 8/c AR489208 ION Sequence 23 from pate ON AR489208	VERSION AR489208.1 GI:47256153 KEYWORG Unknown. ORGANISM Unknown.	Unclassified. CE 1 (bases 1 to 570) RS Stanton, L. W., White, R.T., Damm, D.L., Lewicki, J.A., Joly, A. and Schreiner, G.F.	TITLE Methods for detection and use of differentially expressed genes in disease states JOURNAL Patent: US 67099855-A 23 23-MAR-2004;	ø.	Ouery Match Query Match Best Local Similarity 78.4%; Score 328.4; DB 6; Length 570; Best Local Similarity 78.4%; Pred. No. 1.6e-59; Matches 463; Conservative 0. Mismatches 101: Indels 24. Gans 4.	7 AAAAAAGAATTTATTATTGGGGCAGGGGAACAACAACAAAAATCAAAGCTT 66 111111	67 ATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTT

Search completed: August 18, 2005, 05:26:07 Job time : 5219 secs

```
5.1.6
Compugen Ltd.
GenCore version
Copyright (c) 1993 - 2005
```

1
mode]
3
using
search,
cleic
3
υ
nuclei
δ

August 17, 2005, 22:29:32 ; Search time 668 Seconds (without alignments) 10625.404 Million cell updates/sec Run on:

US-10-735-577-16 1199 Title: Perfect score:

1 ggaactaaaaaaaaacttta......cgggcttcccgcccaccgg 1199 IDENTITY NUC Sequence:

Gapop 10.0 , Gapext 1.0 Scoring table:

8780412 Total number of hits satisfying chosen parameters:

4390206 segs, 2959870667 residues

Searched:

seq length: 0 seq length: 200000000 88 Minimum I Maximum I

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

N_Geneseq_16Dec04: geneseqn1980s: Database

geneseqn2000s:* geneseqn2001as:* geneseqn2001bs:* geneseqn2002as:* geneseqn2002bs:* geneseqn2003cs:* geneseqn2003ds:* geneseqn2004as:* geneseqn2003as:* geneseqn2003bs:* geneseqn1990s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

geneseqn2004bs:*

Description	Adp67435 Human pl1 Adp67436 Human pl1	Adg84359 Human tum	Acn37451 Tumour-as	Abx63001 Human cDN	Aac78192 Human can	Aaf75079 Human col	Aaa46679 cDNA of a	Abn95852 Gene #235	Add18599 Human dis	Adf81436 Leukaemia	Abx13104 Human cDN	Adr24986 Breast ca	Adp54125 Human PRO	Ads17592 Nucleotid	Abq55234 Human ova	Aaa46667 cDNA of a	Abk45339 cDNA enco	Aac10823 Human sec	Adk11670 Breast ca
SUMMARIES	ADP67435 ADP67436	ADQ84359	ACN37451	ABX63001	AAC78192	AAF75079	AAA46679	ABN95852	ADD18599	ADF81436	ABX13104	ADR24986	ADP54125	ADS17592	ABQ55234	AAA46667	ABK45339	AAC10823	ADK11670
DB	12	12	13	80	٣	4	٣	ø	10	10	10	13	13	13	9	e	9	ო	10
* Query Match Length DB	1199	1199	1199	1124	1893	1893	649	649	649	649	649	649	649	649	663	579	571	582	530
% Query Match	100.0	100.0	100.0	58.7	52.9	52.9	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	49.7	46.5	44.8	43.6	43.1
Score	1199	1199	1199	703.4	634	634	601	601	601	601	601	601	601	601	595.8	557	537	523	516.8
Result No.	7 7	n 0	Ω	c S	9 U	c 7	ω υ	o 0	c 10	c 11	c 12	c 13	c 14	c 15	c 16	c 17	18	c 19	c 20

Acc51060 Human S-1	Ach34296 Human end	Adf79487 Leukaemia	Ach25344 Human adu	Aaf75092 Human col	Aah35326 Human col	Adk11672 Breast ca	Abi99809 Mouse isc	Adk11671 Breast ca	Aaa46561 cDNA sequ	Abk72684 DNA encod	Abk63467 Rat seque	Adb58585 Toxicity-	Adb53216 Primary r	Abt42181 Toxicity	Abx13102 Rat CDNA	Adp72563 Renal tox	Aa857410 cDNA #86	Aac81810 Human S10	Ada08452 Mammalian	Ada08453 Mammalian	Adp67424 Human pll	Adp67425 Human pl1	Aai10124 Probe #57	Aba51754 Human foe
								٠,																
ACC51060	ACH34296	ADF79487	ACH25344	AAF75092	AAH35326	ADK11672	AB199809	ADK11671	AAA46561	ABK72684	ABK63467	ADB58585	ADB53216	ABT42181	ABX13102	ADP72563	AAS57410	AAC81810	ADA08452	ADA08453	ADP67424	ADP67425	AAI10124	ABA51754
00	σ	10	σ	4	4	2	9	10	۳	9	9	5	50	2	2	12	4	٣	o	6	12	12	4	4
2016	477	434	466	441	632	350	009	341	009	600	573	573	573	573	573	573	318	294	291	291	291	291	464	464
40.5	35.8	35.3	35.2	34.3	33.0	29.0	28.7	28.3	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	26.4	24.5	24.3	24.3	24.3	24.3	22.8	22.8
485.2	429.4	423	422	411	396.2	347.4	343.6	339.4	329.8	329.8	329.2	329.2	329.2	329.2	329.2	329.2	317	294	291	291	291	291	273.8	273.8
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
U	U	υ	υ	υ	Ü	υ	υ	υ	υ	U	υ	υ	υ	υ	υ	υ	υ	υ		υ		υ		

ALIGNMENTS

pli; pli activity modulator; plasminogen activation; cytostatic; antisense therapy; cancer; tumour; tumour growth inhibition; human; antisense; gene; ds. Human pl1 antisense polynucleotide SEQ ID NO:16. ADP67435 standard; cDNA; 1199 BP. 12-DEC-2003; 2003WO-US040029. 13-DEC-2002; 2002US-0433140P. (first entry) WO2004054517-A2. 01-JUL-2004. 23-SEP-2004 ADP67435; ADP67435

(MEDI-) MEDIOMICS LLC. (WAIS/) WAISMAN D.

Waisman D;

Composition useful for inhibiting growth of tumor in patient, modulates activity of p11 protein and effects change in level of plasminogen activation by a cell. WPI; 2004-487995/46.

Claim 5; SEQ ID NO 16; 140pp; English.

The present invention describes a composition (I) which modulates the activity of a pl1 protein and effects a change in the level of plasminogen activation by a cell. Also described: (1) making (MI) a clonal cell line, which involves isolating a cell, then characterising the activity of a protein produced by the cell or clonal progeny of the cell, where the protein is involved in plasminogen activation; and (2) a

g

```
WPI; 2004-487995/46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004054517-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Waisman D;
                                              721
                                                                                                   781
                                                                                                                              841
                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                  1081
                                                                                                                                                                                                                                                                                                                                                                            1081
                                                                                                                                                                                                                                                                                                                                                                                                       1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADP67436;
                      721
                                                                         781
                                                                                                                                                         841
                                                                                                                                                                                    901
                                                                                                                                                                                                                                        961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                        ò
                                                                                                   g
                                                                                                                           ð
                                                                                                                                                    셤
                                                                                                                                                                                    ò
                                                                                                                                                                                                          g
                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                         ద
clonal cell line (II) useful in the identification of composition that modulate pl1 activity, where the clonal cell line is obtained by (MI).

Coll has cytostacic activity, and can be used in antisense therapy. (I) is useful for modulating the activity of pl1 which involves administering (I) to a cell. The cell can be a human cancer cell, chosen from a HT1080 fibrosarcoma cell, a LNCaP prostate cancer cell and a CCL-22 colorectal adenocarcinoma cell, a LNCaP prostate cancer cell and a CCL-22 colorectal cancer in a patient e.g., mouse which involves administering (I) to a cancer cell in the patient. (I) is useful for inhibiting the growth of tumours or inhibiting tumour cell invesion in a patient, which involves administering (I) to a cancer cell in the patient. (II) is useful for identifying a composition that modulates pl1 activity which involves administering the composition that modulates pl1 activity which involves coll of a clonal cell line that had not received the composition, and coll of a clonal cell line that had not received the composition activity is a change in pl1 activity is a change in the level of plasminogen activation activity. The change in pl1 activity is a change in the level of plasminogen activation activity. The present sequence represents a pl1 antisense polynucleotide, which is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCATTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                             GGAACTAAAAAGAACTTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCTTTATCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGGTGGTGTGGTGGTTGAAGCCTTGGCCGAGGCGCGGCGGAGCTGTGGGCTGGGCGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGAATITGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGGTGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGGACGCTGGGCGAAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        credacecececedadadecececececececececeroricerrecriativeracerecee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAACTAAAAAGAACTTTATTTATTGGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                           Length 1199;
                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                              Sequence 1199 BP; 235 A; 338 C; 337 G; 289 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                         DB 12;
                                                                                                                                                                                                                                                                                                        Query Match
100.0%; Score 1199; DB 12;
Best Local Similarity 100.0%; Pred. No. 3.3e-293;
Matches 1199; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            561
                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
       셤
                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                      D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 %
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

```
1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1021 GGCCACCTACGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGGGTGGCACGTGGAG 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG 1140
                          780
                                                                                       840
                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                      960
                                                                                                                                                                                                                                                                                                                                           ATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTGGTTTTAGAAAGTGTACAAATCAAA 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGCCTGCGCCAGTGGAGGGCGGCACCTCCCCAGAAGCCGGGCTTCCCGCCCCACCGG 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             p11; p11 activity modulator; plasminogen activation; cytostatic;
antisense therapy; cancer; tumour; tumour growth inhibition; human; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Composition useful for inhibiting growth of tumor in patient, modulates activity of pl1 protein and effects change in level of plasminogen activation by a cell.
CTCCCCCAGCCCTGTCTCCTCCCCCTCTTCCTGCCCCCGACTCCCCCGACCCCGGGGCGCG
                                                                                                                        ATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTGGTTTTAGAAAGTGTACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCCCAGAACCAGAGGTAACCGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACCCGGCGTCCTGCGGGTGGGGCACGTGGCGAGAACCAGAGGTAACCGGCTCTGC
                                                                                           AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes a composition (I) which modulates the activity of a pl1 protein and effects a change in the level of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human p11 sense polynucleotide SEQ ID NO:17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 16; SEQ ID NO 17; 140pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADP67436/c
ID ADP67436 standard; cDNA; 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-DEC-2003; 2003WO-US040029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-DEC-2002; 2002US-0433140P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MEDI-) MEDIOMICS LLC. (WAIS/) WAISMAN D.
```

```
clonal cell line, which involves isolating a cell, then characterising clonal cell line, which involves isolating a cell, then characterising clonal cell line, which involves isolating a cell, then characterising clonal cell line (a process of the cell) where the protein is involved in plasminogen activation; and (2) a clonal cell line (II) useful in the identification of composition that condulate pulsativity, where the clonal cell line is obtained by (M1).

(I) has cytostatic activity, and can be used in antisense therapy. (I) is useful for modulating the activity of pl1 which involves administering constromm cell, a LNCaP prostate cancer cell and a CCL-22 colorectal adenocarcinoma cell, a LNCaP prostate cancer cell and a CCL-22 colorectal adenocarcinoma cell. (I) is also useful for reducing the development of cancer cell in the patient. (I) is useful for inhibiting the growth of cumours or inhibiting tumour cell in the patient. (II) is useful for identifying a composition to (II) obtained by (M1), determining the composition to (II) obtained by (M1), determining the change in pl1 activity of a cell of the clonal cell line relative to a cell of a clonal cell line that had not received the composition, and identifying the composition that produces a change in pl1 activity. The present sequence represents a pl1 sense polymucleotide, which is used in the present sequence represents a plant in manning the composition that produces a change in pl1 activity. The activity is a change in the level of plasminogen activition that a change in the level of plasminogen activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            in the exemplification of the present invention.
```

Sequence 1199 BP; 289 A; 337 C; 338 G; 235 T; 0 U; 0 Other;

GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATGAA 1140 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 1080 960 360 540 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCTTT 660 9 540 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT 240 420 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAATCCA 780 480 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTGTTAAGTAGCCTTTATCCCCA 720 900 GTGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTTATT GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG CTGGACGCGCGCGCGCGCGCGCGCGCGCTGTGCGCCTTTCCTTAGTACGTGCGGC CTGGACGCGGGGCGGAGAGGCGCGCGCGCGCTGTGCCTTACTACGTGCGGCCCCT GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT TTGGTGTGTGGTCGTTGAAGCCTTGGCCGAGGCGCGCGGCGGACGCTGGGCGGAGCTGGGCGAG 0; Gaps Length 1199; Indels DB 12; Query Match 100.0%; Score 1199; DB 12; Best Local Similarity 100.0%; Pred. No. 3.3e-293; Matches 1199; Conservative 0; Mismatches 0; 719 1139 1019 629 61 121 181 959 899 839 541 599 241 301 361 421 779 481 501 a 쉱 8 6 8 6 <u>۾</u> ۾ ઠે q ò ઠે ò g ∂ 8 & 8

& a	661 GGGTGGGTAGAGGGAGGGGGGGGAGGGGAGGAGGAGGGGGG
& B	
हे ह	84
8 8	41 AGAGGTTCTTGTAAACTTCTGTAGAAAGGGTCCTGCTCGGATATTTCAGGGC 90
අධ ර	59 AGAGCGTTCTTGTAAACTTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC 30
& a	901 AFCCCACCTGAGCCTGCCTTCCTCTGGGTTTGGTTTTAGAAAGTGTACAAATGAAA 960
g d	961 GAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGGAGAACCAGAGGTAACCGGCTCTGC 1020
oy d	1021 GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG 1080 179 GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCTGCAGGGAGTGGCACGTGGAG 120
& 4	1081 TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG 1140
& 4	1141 CGGCTGCGCCAGTGGAGGGGGGCACCTCCCCAGAAGCCGGGCTTCCGGCCCCACCGG 1199
RESU ADQ8 ID	LT 3 4359/c ADQ84359 standard; cDNA; 1199 BP.
X X	ADQ84359;
X E3	07-OCT-2004 (first entry)
X 8 3	Human tumour-associated antigenic target (TAT) cDNA sequence #1173.
(22)	human; tumour-associated antigenic target; TAT; cytostatic; gene therapy; cancer; cell proliferative disorder; gene; ss.
¥8;	omo sapiens
Y Z S	WO2004060270-A2.
₹ & \$	22-JUL-2004.
4 F 3	15-OCT-2003; 2003WO-US029126.
\$ # \$	18-OCT-2002; 2002US-0418988P.
PA PA	(GETH) GENENTECH INC. (WUTD/) WU T D. (ZHOU/) ZHOU Y.
¥ E 3	Wu TD, Zhou Y;
\$ # \$	WPI; 2004-534300/51.
{ E E }	New nucleic acid molecule and encoded polypeptide, for diagnosing, preventing or treating cell proliferative disorders such as cancer.
SS &	Claim 1; SEQ ID NO 1173; 5504pp; English.

The present invention describes an isolated tumour-associated antigenic target (frat) nucleic acid comprising; (a) any of 4622 nucleotide sequences (see SEQ ID NO.1 to 4622); (b) the full-length coding region of (a); (c) the complement of (a) or (b); (d) a sequence that has 80% sequence identify to (a) -(c); or (e) a sequence that hybridises to (a) -(c). Also described: (1) an expression vector comprising the above nucleic acid; (2) a host cell comprising the above expression vector; (3) a process for producing a polypeptide; (4) an isolated polypeptide decomprising; (a) an animo acid sequence encoded by any of the above nucleotide sequences for producing a polypeptide; (b) a comprising the above polypeptide; (b) a comprising the above polypeptide; (b) a comprising the above polypeptide (a) an isolated antibody that binds to (a) or heterologus polypeptide; (f) a process or producing the antibody that binds to the above polypeptide; (f) a producing the antibody that binds to the above polypeptide; (f) a cumour-associated antigenic trarget (TAT) composition of matter comprising the above polypeptide; (10) a tumour-associated antigenic trarget (TAT) composition of matter comprising the above polypeptide; (11) an article of manufacture comprising a container; (c) the composition of matter contained within the container; (12) methods of the prosession of matter contained within the container; (12) methods of the above proceshin; (13) a method of a cell that expresses the above protein; (14) a method of described above; (15) methods of diagnosing the presence of a protein in a sample expresses the presence of a tumour in a sample expresses the presence of a tumour in a sample expresses the presence of a tumour in a confining the presence of a protein in a sample expresses the presence of a tumour in a sample expresses the presence of a tumour in a sample expresses the presence of a tumour in a sample expresses the presence of a tumour manuely of the above protein; or the above protein; and (17) a method of binding an preventing or treating cancer. The composition is also used for preparing a medicament for the therapeutic treatment or diagnostic detection of a cancer. The present sequence represents a human TAT cDNA sequence from the present invention. cell proliferative disorder or

Sequence 1199 BP; 289 A; 337 C; 338 G; 235 T; 0 U; 0 Other;

1020 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 1080 180 240 960 300 900 360 840 420 780 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG Greadecececantragegaaaagaagererggaagecearerreceareradaereg TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA Gaps Length 1199; ö 0; Indels 100.0%; Score 1199; DB 12; 100.0%; Pred. No. 3.3e-293; live 0; Mismatches 0; Query Match
Best Local Similarity 100.
Matches 1199; Conservative 1139 1199 181 1019 61 121 959 899 839 241 301 361 셤 g g ò 8 g g ò 8 6 8 ò 8

1080 1140 GAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAACCAGAGGTAACCGGCTCTGC 1020 480 99 009 009 099 540 720 480 780 840 900 300 096 240 180 120 420 360 CGGCCTGCGCCAGTGGAGGGGCGCACCTCCCCAGAAGCCGGGCTTCCCGCCCCACCGG 1199 9 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 779 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTTAAGTAGCCTTTATCCCCA GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 359 AGAGCGTTCTTGTAAACTTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC ATCCCCACCCTGAGCCTGCCCTTCCTCTCGGGTTTGGTTTTAGAAAGTGTACAAATCAAA ATCCCCACCCTGACCTGCCCTTCCTCTCGGTTTGGTTTTAGAAAGTGTACAAATCAAA GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG 1081 TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGGTCTCGG 119 TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTTGGGGGGGTCTGGGGGGTTCGG GGGTGGGTAGAGGGGGGGGGGGGAGCGGGAGGAGCCTGGCGGGGGCGTCGGCAGGGCG 239 GAACCCGGCCGTCCTGCGGGTGGGGCACGTGGCGCAGAACCAGAGGTAACCGGCTCTGC CTGGACGCGGGCGGAGCGCGAGCGCGGGCTGTGCCTTTCCTTAGTACGTGCGGC CTCCCCCAGCCCTGTCTCCTCCCCCCTTCCTGCCCCCGACTCCCCCGACCCCGGGCGCG AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTGGAATATTTCAGGGC cescenececeagnesagesecedenecececeagaaecesecrneececececeaeceae 541 599 539 479 841 299 961 1021 1141 59 481 601 199 781 901 421 721 셤 임 셤 임 ò g g 유 유 셤 ò 셤 8 g 8 염 ઠે ò 8 8 ð ò ઠે ò

ACN37451/c ID ACN37451 standard; cDNA; 1199 (first entry) 18-NOV-2004 ACN37451; RESULT 4

Tumour-associated antigenic target; TAT; human; overexpression; cancer; tumour; diagnosis; cell proliferative disorder; breast cancer; colorectal cancer; lung cancer; ovarian cancer; liver cancer; central nervous system cancer; bladder cancer; pancreatic cancer; cervical cancer; melanoma; leukaemia; hybridisation probe; chromosome identification; chromosome mapping; gene mapping; Tumour-associated antigenic target (TAT) cDNA DNA323900, SEQ ID NO:342 gene therapy; cytostatic; gene; ss

Ношо

```
TCCTATCGACCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACCCGGCCGTCCTGCGGGTGGGGCACGCTGGCGCAGAACCAGAGGTAACCGGCTCTGC 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAG 1080
                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAACCCGGCCGTCCTGCGGGGTGGGGCACGCTGGCGCAGAACCAGAGGTAACCGGCTCTGC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCCACCTACGGGTCTAGGAATTACTTGCTGGATGACCCTGCAGGAGTGGCACGTGGAG 120
                                                                                                          720
                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCCCACCCTGAGCCTGCCTTCCTCTGGGTTTGGTTTTAGAAAGTGTACAAATCAAA 240
                                                                                                                                                                                        99
                                                                                                                                                                                                                             909
                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGCCTGCGCCAGTGGAGGGGGGGGCACCTCCCCAGAAGCCGGGCTTCCCGCCCACCGG 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; gene; ss; vascular tissue; cytostatic; atherosclerosis; cardiant; hypotensive; antidiabetic; gynaecological; vasotropic; cerebroprotective; gene therapy; vascular disease; cancer; coronary; artery disease; hypertension; diabetes; pre-eclampsia; restenosis; ischaemia-reperfusion injury; stroke.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                   rccaggrccrrcarrarrrgrccacaggccaggggrcrrrrrgarrrrccaaaaarcca
                                                                                           CTCCCCCAGCCCTGTCTCCTCCCCCCTGCCCCCCGACTCCCCGACCCCGGGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGGCCCACGCCCTGCCTCCGCTCCCGGACCCGCCTCGCAGAGCCTCGCCCCCGCCCCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCTATCGACTCTCAGAGGCACTATCAGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGG
                                                                                                                                                                      GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                              AGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCCCCACCCTGAGCCTGCCCTTCCTCCGGTTTTGGTAAAGTGTACAAATCAAA
                                                                         GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                  GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                           TIGGIGIGGICCGTIGAAGCCTIGGCCGAGGCGCGCGGCGGACGCTGGGCGAGCTGGGCGAAG
                                                                                                                                                                                                                                                                                                         CGGCCTGCGCCAGTGGAGGGGGGGCACTCCCCAGAAGCCGGGCTTCCCGCCCCACGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human cDNA #1 differentially expressed in activated vascular tissue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABX63001 standard; cDNA; 1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-FEB-2003
                                                                                                          179
                                                                                                                                                481
                                                                                                                                                                                        719
                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                 629
                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                    539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABX63001;
361
                                                                         421
                                                                                                                                                                                                                                                                                                                                          599
                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
8 6
                                                                                                   셤
                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                       ò
                                                                                                                                              8
                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . Ṣ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to human tumour-associated antigenic target (TAT) polypeptides, and their related nucleic acids. The TAT polypeptides are overexpressed in cancer tissues compared to normal Lissues, and may thus serve as effective targets for the diagnosis and treatment of cancer in mammals. The invention also relates to nucleic acids and polypeptide sequences at least 80% identical to the TAT nucleic acids and polypeptides; expression vectors and host cells comprising a TAT nucleic acids and antibody specific for a TAT polypeptide; dusion proteins comprising a TAT polypeptide; and methods and compositions for the treatment or diagnosis of cancer in mammals. TAT polypeptides, nucleic acids, antagonists, binding molecules and compositions are useful for diagnosing or treating a cell proliferative disorder associated with increased TAT expression, particularly cancers such as breast cancer, concert, pancreatic cancer, cancer, lung cancer, ovarian cancer, liver cancer, badder cancer, particularly cancers of the central nervous system, melanoma and leukaemia. TAT nucleic acids may further be used as hybridisation probes, in chromosome and gene mapping, in chromosome identification and in gene therapy. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAACTAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTACATTIGCTAAGIGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGG 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                               New tumor-associated antigenic target polypeptides and nucleic acids, useful in preparing a medicament for treating or detecting a proliferative disorder, e.g. breast, lung, colorectal, ovarian or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITIACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1199;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1199 BP; 289 A; 337 C; 338 G; 235 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 1199; DB 13;
100.0%; Pred. No. 3.3e-293;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 342; 7273pp; English
                                                                                                        02-OCT-2002; 2002US-0414971P
                                                                     29-SEP-2003; 2003WO-US028547
                                                                                                                                                                                                                                                                                                                                            prostate cancer or tumor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.
Matches 1199; Conservative
                                                                                                                                                                                    Zhou
                                                                                                                                              (GETH ) GENENTECH INC
                                                                                                                                                                                                                         2004-347921/32.
                                                                                                                                                                                    Zhang Z,
                                                                                                                                                                                                                                             P-PSDB; ABM80135
                               15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
```

8 ð 셤 g ઠે

8

8

φ

494

434 360 420

374

480

314

540

194 591 134 651 711 14

```
GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCC 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; cancer associated gene; cancer antigen, detection; cancer; diagnosis; cytostatic; proliferative; vulnerary; immunomodulator; antifidabetic; antifrheumatic; antifrheumatic; antifarthritic; antiviral; antiinflammatory; antithyroid; antiallergic; antibacterial; cardiant; dermatological; neuroprotective; thrombolytic; cagulant; noctropic; vasotropic; antipsoriatic; antiangiogenic; gene therapy; inflammation; immune disorder; haematopoletic cell disorder; autoimmune disorder; allergic reaction; graft versus host disease; organ rejection; haemostatic; thrombolytic; cardiovascular disorder; infection; neurological disease; drug screening; ss.
TCCAGGTCCTTCATTATTTTGTCCACAGCGGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                         253 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                               GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCACATTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                      rccaggrccrrcarrarrrgrccacaggccagagggrcrrrrgarrrccaaaaarcca
                                                                                                                                                                                                                                                                                            GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                      GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGGTGTCGTTGAAGCCTTGGCCGAGGCGCGCGCGCAC-----GCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human cancer associated gene sequence SEQ ID NO:586.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAC78192 standard; cDNA; 1893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-0124270P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAR-2000; 2000WO-US005882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCAGGCGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              712 GGCAGGGCGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200055350-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    652
                                                             241
                                                                                                                                                                               433
                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                  313
                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13
                                                                                                                                         301
                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAC78192;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                               g
                                                                                                                                         ð
                                                                                                                                                                         g
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention relates to a combination comprising several CDNAs that are differentially expressed in activated vascular tissue. The invention also discloses a high throughput method for detecting differentially expressed CDNAs in a sample. The CDNAs of the invention may have antidiabetic; cytostatic; cardiant; hypotensive; antidiabetic; cynaccological; vasoriopic and cerebroprofective activities and may be used in gene therapy. The CDNAs of the invention may be used in a high-throughput methods for detecting differential expression of one or more compound that specifically binds to identify a molecule or compound that specifically binds a CDNA of the invention. A protein encoded by the CDNA may be used to screen several conjection or compound that specifically binds a CDNA of the invention. A protein encoded by the CDNA may be used to screen several conjection or compounds to identify a ligand that specifically binds to the protein, or to produce or purify an antibody to the protein that can be used to detect a protein in a sample. The nucleotides may be useful for cidagnosing, staging, treating, or monitoring the progression of treatment of a vascular disease, e.g. atherosolatosis, cancer, coronary artery disease, hypertension, diabetes, pre-eclampsia, ischaemia reperfusion injury, restenosis, or stroke. The CDNAs can also be used for large-scale conjectic or gene expression analysis of several new nucleic acid molecules. Antibodies to the proteins encoded by the CDNAs can especial conjection analysis of several new nucleic acid associated with abnormalities in the expression, amount or distribution of the protein. The present sequence represents a cDNA of the invention that the tribute of the protein contract diseases associated with abnormalities in the represents a cDNA of the invention that is differentially expressed in activated vascular tissue. Note: The contract of the specification, but the contract of the specification, but the contract of the specification, but the contract of the contract of the c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAACTAAAAAAGAACTTTATTTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                Combination for diagnosing, staging, treating, or monitoring the progression of treatment of a vascular disease, e.g. atherosclerosis, comprises several cDNAs that are differentially expressed in activated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITACATTIGCTAAGIGTCCTGATCTCCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCTTATCTGGTATTTAACTTTTCTTTCTTGTCTAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTCTTCTGCTTGAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 8; Length 1124;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1124 BP; 320 A; 286 C; 261 G; 254 T; 0 U; 3 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          http.seqdata.uspto.gov/sequence.html?DocID=20020137081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                58.7%; Score 703.4; DB 8; 98.6%; Pred. No. 1.1e-167; iive 0; Mismatches 1;
                                                                                                                                                                           28-JUL-2000; 2000US-0222469P.
08-JAN-2001; 2001US-0260483P.
                                                                                                                                       38-JAN-2002; 2002US-00044090.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page; 18pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      723; Conservative
                                                                                                                                                                                                                                                                                                            WPI; 2003-110597/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                (BAND/) BANDMAN O.
                                                           US2002137081-A1
                                                                                                                                                                                                                                                                                                                                                                                                           vascular tissue
                       sapiens
                                                                                                 26-SEP-2002
                                                                                                                                                                                                                                                                        3andman 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local (
                         Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Simi
hes 634;
                                                                                                                                                   1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                        셤
                        8 6
                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                       AAC77607 to AAC78448 encode the human cancer associated proteins given in AAB43198 to AAB44239. The proteins can have activities based on the tissues and cells the genes are expressed in. Example of activities inclaimator; antiasthmatic; antiarthritic; antidiabetic; antiathritic; and propredictive; cardiant; thrombolytic; coagulant; coorropic; vasotropic; antipportatic and antiangiogenic. The polynucleotides and polypeptides can be used for preventing, treating or antiathritic conditions and diagnosing pathological conditions. Polynucleotides, polypeptides, antibodies, agonists and antagonists from the present invention may be used to treat immune disorders by activating the proliferation, differentiation or mobilisation of immune cells, to treat disorders of haematopoietic cells, autoimmune disorders, allergic reactions, graft versus host disease and organ rejection, modulate haemostatic or thrombolytic activity, modulate conference and antagonists and antagonists may be used in drug screens. AAC78449 to AAC78457 and AAC784570 and AAC784570 and AAC784570 and AAC784570 and AAC784570 and AAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 1417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 1297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rcreccracricrircccricrecricareraracracaaaragrearrecaare 1537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 1477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTCTTGGTTGTCAAATGAGGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                        Novel isolated nucleic acids comprising sequences encoding peptides useful for treating or diagnosing e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1893;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1893 BP; 543 A; 466 C; 419 G; 458 T; 0 U; 7 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              52.9%; Score 634; DB 3; Le
100.0%; Pred. No. 5.1e-150;
ive 0; Mismatches 0;
                                                                                                                                                                     Claim 1; Page 1108-1109; 2352pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 634; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               present invention
Ruben SM;
                                           WPI; 2000-587533/55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                 P-PSDB; AAB43983
G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local
  Rosen
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

```
120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nucleic acids encoding 13 human colon cancer associated polypeptides, useful for preventing, diagnosing and/or treating e.g. cancers (especially colon cancer), Parkinson's disease and diabetic retinopathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to 13 human colon cancer-associated proteins. These proteins and the nucleic acid encoding them may be used in the prevention, diagnosis and treatment of diseases associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GGAACTAAAAAGAACTTTATTTATTGGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52.9%; Score 634; DB 4; Length 1893; ilarity 100.0%; Pred. No. 5.1e-150; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1893 BP; 543 A; 466 C; 419 G; 458 T; 0 U; 7 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inappropriate colon cancer-associated protein expression
                                                                                creaaceceaegeaaaageceaececeeec 1203
                                                       634
                                                                                                                                                                                                                                         duman colon associated protein cDNA seguence #3.
                                                       CTGGACGCGGGGGGAGAGGCGAGCGCGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 308-309; 326pp; English.
                                                                                                                                                                                                                                                                   Human; colon; cancer; disease; ss.
```

ω

```
AAA46668-79 represent differentially expressed human genes, associated with disease states and disorders. The specification describes methods preventing, diagnosing and treating cardiac, kidney and inflammatory diseases associated with inappropriate expression of differentially expressed cardiac, kidney and inflammatory genes (e.g. AAA6668-79). These genes include 1-8U, prostacyclin-stimulating factor, isf-2, tissue specific mRNA, insulin-like growth factor binding protein 6, OSF-1, gas-1, YMP, BTG2, pre-B cell stimulating factor homologue (SDF1a), peripheral benzodiazepine receptor, and cellular ligand of annexin II ($11), respectively. These diseases include congenital heart failure, dilated congestive cardiomyopathy, hypertrophic cardiomyopathy, restrictive cardiomyopathy, andlye disease, angina pectoris, myocatic valve disease, tricuspid valve disease, angina pectoris, myocatic valve disease, tricuspid arrhythmia, pulmonary hypertension, arterial hypertension, renovascular
                                                                                                                                                                                                                                                                                                                                                                                                                         hypertension, arteriosclerosis, atherosclerosis and/or cardiac tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649 GGAACTAAAAAAGAACTTTATTATTGAGGGCAAGGGGATGCAAACAATACAAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          290 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           230 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               350 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTGGTGTCGTCGTTGAAGCCTTGGCCGAGGCGCGGGGCGGACGCTGGGCCGAGCTGGGCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              469 GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 601; DB 3; I
Pred. No. 7.5e-142;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGACGCGGGGGGGAGGCGAGC 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27
                            Disclosure, Fig 7L; 170pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           crearceceaceasaseceasec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 50.1%;
Best Local Similarity 99.7%;
Matches 623; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABN95852 standard; DNA; 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 9
ABN95852/c
ID ABN958
       x 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                 1477
                                                                                                                                                                           TCCAGGTCCTTCATTATTTTGTCCACAGGCAGGGTCTTTTTGATTTTCCAAAAATCCA 1417
                                                                                                                                                                                                                                                                         GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 1357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 1297
                                                                                                                                                 420
                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Differentially expressed human gene; cardiac disease; kidney disease; inflammatory disease; I-8U; prostacyclin-stimulating factor; isf-2; itsue specific mRNA; insulin-like growth factor binding protein 6; OSF-1; gas-1; XMP; BTG2; pre-B cell stimulating factor homologue; SDFla; peripheral benzodiazepine receptor; annexin II cellular ligand; pl1; congenital heart failure; dilated congestive cardiomyopathy; hyperrophic cardiomyopathy; restrictive cardiomyopathy; mitral valve disease; aortic valve disease; aortic valve disease; annian pectoris; myocardial infarction; cardiac arrhythmia; pulmonary hyperrension; arerial hypertension; renovascular hypertension;
                                              GTGAGGCCCGCAATTAGGGAAAAGCTCTGGAAGCCCACTTGCCATCTCTACACTGG
                                                                                    GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                               TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Schreiner GF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Preventing, diagnosing and treating cardiac, kidney and inflammatory disorders using cardiac genes that are differentially expressed in disease states such as cardiac arrhythmia and arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDNA of a human gene encoding cellular ligand of annexin II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lewicki JA, Joly A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     arteriosclerosis; atherosclerosis; cardiac tumour; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGACGCGGGCGGAGAGCGCGCGCGCGGCGC 1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGACGCGGGCGGAGAGGCGAGCGCGGGGGC 634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DĽ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             679/c
AAA46679 standard; cDNA; 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99WO-US029941.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Damm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0113008P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          112. .405
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stanton LW, White RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-451904/39.
P-PSDB; AAY93605.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200035473-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SCIO-) SCIOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-JUN-2000
                                                                                              1536
                                                                                                                                                                                          1476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1296
                                                                                                                                                                                                                                                                                              1416
                                                                                                                                                                                                                                                                                                                                                                                            1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1236
                                                301
                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA46679;
                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
AAA46679/C
1D AAA46679/C
XX AAA46
XXX AAA46
XXX DJI E6
XX DJI E7
XX DJI E6
XX
                                                                                    엄
                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                       <u>ک</u> ط
                                                                                                                                                                                                                                                                                                                                                                                                                                        8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                              ઠે
                                                                                                                          ઠે
                                                                                                                                                                                                                                 ठे
                                                                                                                                                                                                                                                                               셤
```

ä

590 120 530 180 470 240

9

300

351

411

360

291

420 231 480 171 540 111 900

σ

360

420 291

480

540

111

22

```
New substantially purified polypeptide, useful for diagnosing or treating a hypoxia-regulated condition, such as cancer, ischemia, reperfusion injury, retinopathy, pre-eclampsia, atherosclerosis, inflammation, or
                                                                                                                                                                                                                                                                                                                                                                          TTGGTGTGGTCCGTTGAAGCCTTTGGCCGAGGCGCGGCGGACGCTGGGCCGAGCTGGGCGGAG 600
GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human; disease state; cytostatic; antiinflammatory; ophthalmological; antiarteriosclerotic; vulnerary; gene therapy; hypoxia-regulated condition; tumourigenesis; angiogenesis; apoptosis; inflammation; erythropoiesis; glycolygis; gluconeogenesis; glucose transportation; catecholamine synthesis; iron transport; infire condition; reperfusion; retinopathy; neonatal stress; pre-eclampsia; atherosclerosis; inflammatory condition; wound healing; gene; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention relates to novel human genes and gene product which are implicated in certain disease states. Compounds which modulate the
                                                                                GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                         GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                            GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                   GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               я,
Э
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mundy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Naylor S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human disease related protein DNA seguence SegID30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Harris RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 27; SEQ ID NO 30; 424pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGACGCGGGGGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     crecacecececacacace
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ward NR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (OXFO-) OXFORD BIOMEDICA UK LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-AUG-2001; 2001GB-00020558.
05-OCT-2001; 2001GB-00024037.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-AUG-2002; 2002WO-GB003892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA; 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kingsman SM, White J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-290046/28.
P-PSDB; ADD18598.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADD18599 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003018621-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-MAR-2003
                                       301
                                                                                350
                                                                                                                        361
                                                                                                                                                               290
                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                  230
                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                 170
                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                    110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADD18599;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 10
ADD18599/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             용
                                                                                                                                                      g
                                                                                                                                                                                                      8
                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                            ò
                                                                                                           Š
                                                                                                                                                                                                                                                                                     ठे
                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel method for diagnosing and detecting the progression of liver cancer, hepatocallular carcinoma or metastatic liver tumour in a patient, and differentiating metastatic liver cancer from hepatocallular carcinoma in a patient, involving detecting the level of expression of two or more genes represented in ABN93503-ABN97455 in a tissue sample. The method of the invention has hepatotropic, and cytostatic activity. The method is useful for diagnosing and detecting the progression of liver cancer, hepatocallular carcinoma and metastatic liver carcinoma in a patient. The method is useful for identifying expression profiles which serve as useful diagnostic markers as well as markers that can be used to monitor disease states, disease progression, and contity, drug efficacy and drug metabolism. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTCTTGGTTGTCAAATGAGGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITACATITGCTAAGIGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Diagnosing and detecting the progression of liver cancer, hepatocellular carcinoma or metastatic liver tumor in a patient, involves detecting the
                                                                                                                                     Gene; liver cancer; ds; hepatocellular carcinoma; hepatotropic; metastatic liver tumour; cytostatic; expression profile; disease state; disease progression; drug toxicity; drug efficacy; drug metabolism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        carcinoma or metastatic liver tumor in a patient, involves detecti:
level of expression of two or more genes in a liver tissue sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vockley JG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     50.1%; Score 601; DB 6; Lilarity 99.7%; Pred. No. 7.5e-142; Conservative 0; Mismatches 0;
                                                                                                Gene #2350 used to diagnose liver cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 2350; 298pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peres-Da-Silva S,
                                                                                                                                                                                                                                                                                                                                                    02-OCT-2001; 2001WO-US030589
                                                                                                                                                                                                                                                                                                                                                                                              02-OCT-2000; 2000US-0237054P
                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                     LOGIC INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alvares C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-426119/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                    WO200229103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                     (GENE-) GENE
                                                                                                                                                                                                                            Homo sapiens.
                                                        13-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  623;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Horne D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loca
Matches
```

셤 ò ద 8 셤 ò g ò

```
proteins of the invention may have cytostatic, antiinflammatory, ophthalmological, antiarteriosclerotic or vulnerary activities. The agequences of the invention may be useful for gene therapy. The invention may be useful for gene therapy. The invention may be useful for diagnosing or treating a hypoxia-regulated condition, such as tumourigenesis, angiogenesis, apoptosis, inflammation, erythropoiesis, or the biological response to hypoxia conditions transportation, catecholamine synthesis, gluconegenesis, glucose transportation, catecholamine synthesis, iron transport or nitric oxide synthesis. The disease includes cancer, ischaemic conditions, reperfusion injury, retinopathy, neonatal stress, pre-eclampsia, atherosclerosis, a disease related received.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCA 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                   590
                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gréadécececaarradegaaaagaagereregaaagececaerrrecearereraeaeres 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rcreccracrrcrrcrrcrrcrrcrrcrrcrrcrrcracracaaaragrcarrccarrccarre 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           52
                                                                                                                                                                                                                                                                                                                                                                  TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGGTGTGTGCGTTGAAGCCTTGG-CGAGGCGCGGCGGAGCGCTGGGCGGGCGAG
                                                                                                                                                                                                                                                                                                                                                GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAGATTCCTTAAGCGACCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGGTGTGCTCCGTTGAAGCCTTGGCCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                   disease related protein encoding DNA sequence of the invention.
                                                                                                                                                                                                                                                                                                             5;
                                                                                                                                                                                                                                                                           Length 649;
                                                                                                                                                                                                                                      Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                      Score 601; DB 10;
Pred. No. 7.5e-142;
0; Mismatches 0;
                                                                                                                                                                                                                                                                         50.1%; Score 601; 99.7%; Pred. No. 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGACGCGGGGGGAGAGCCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACGCGGGGGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                             Matches 623; Conservative
                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                     589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    용
       88888888888888888
                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

```
The present invention relates to a method (M1) for determining the subtype of leukaemia cells and whether a patient sample contains leukaemia cells. The method comprises determining the expression profile of a group of markers in a patient sample. The method is useful for determining the presence of leukaemia cells, its types or subtypes, and for the preparation of a medicament for treating leukaemia.
                                                                                                                                                                                                                                                                                              Dugas M;
                                                                                                                                                                                                                                                                                                                                                                  Determining the subtype of leukemia cells and whether a patient sample contains leukemia cells or other cells, useful for treating leukemia, comprises determining the expression profile of a group of markers in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      410 TCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCTTATCTGGTATTTAACTTTTCTTTTCTTGTCTAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTTATCTGGTATTTAACTTTTCTTTCTCTCGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATICCTIAAGCGACCCTITGGGACAACTCTIAICAGGGAGGAGCGAACTGCTCAIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCCCAATTAGGGAAAAAAGAGCTCTGGAAGCCCACTTTGCCATCTTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2;
                                                                                                                                                                                                                                                                                                Schnittger S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 601; DB 10;
Pred. No. 7.5e-142;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                Kohlmann A,
                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 1992; 2938pp; English
             88
            Cytostatic; Gene therapy; leukaemia;
                                                                                                                                                                                                      DEUT KREBSFORSCHUNGSZENTRUM.
UNIV LUDWIG MAXIMILIANS.
HAFERLACH T.
                                                                                                                                                                                                                                                                                                            Eils R, Brors B, Mergenthaler S;
                                                                                                                                                                                                                                                                                                 3
                                                                                                                                                            05-NOV-2001; 2001EP-00126244
30-APR-2002; 2002EP-00009758
                                                                                                                                04-NOV-2002; 2002WO-EP012303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 99.7%;
Matches 623; Conservative
                                                                                                                                                                                                                                                                                              Schoch C,
                                                                                                                                                                                                                                                                                                                                          WPI; 2003-505037/47.
                                                                                                                                                                                                                                                 SCHOCH C.
                                                                     WO2003039443-A2
                                                                                                                                                                                                                                                                                                                                                                                                                    patient sample.
                                         Unidentified
                                                                                                                                                                                                                                                                                                Haferlach T,
                                                                                                 15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                     (UYLU-)
(HAFE/)
                                                                                                                                                                                                       (DEKR-)
                                                                                                                                                                                                                                                                 KERN/)
                                                                                                                                                                                                                                                 (SCHO/)
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
```

'n

590 120 180 470 240

530

300

351

411

420

Leukaemia-related DNA sequence #1992.

(first entry)

26-FEB-2004

649

standard; DNA;

ADF81436

RESULT 11

ADF81436

ADF81436/ ID ADF8 XX AC ADF8 XX DT 26-F XX DE Leuk

360

```
589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       51
    $$$$$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Identifying a voltage gated sodium channel (VGSC) modulator for producing analgesia and for relieving chronic pain, e.g. osteoarthritis or HIV pain, comprises bringing into contact a VGSC, a p11 peptide and a test
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to identifying a modulator of a voltage gated sodium channel (VGSC) e.g. Nav1.8 comprising: (a) bringing into contact a VGSC, a pll peptide (a small calcium binding protein of the S-100 family) and test compound (tc) so that the VGSC and the pll peptide can form a complex in the absence of the (tc); and (b) measuring an activity of the VGSC, where a change in the activity of the VGSC relative to the activity in the absence of the (tc) indicates that the (tc) is a modulator of VGSC. Also included are a method of enhancing the functional expression of a VGSC in a cell by increasing the level of pl1 in the cell, a
                                        171
                                                                                                                          111
                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pain;
pain;
                                                                                                                                                                                                       52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              small calcium binding procein; analgesia; chronic pain; osteoarthritis; rheumatoid arthritis; neuropathic pain; cancer pain; tri geminal neuralgia; hyperalgesia; inflammatory pain; nociceptive pain tabes dorealis; phantom limb pain; spinnal cord injury pain; central pain post-herpetic pain; HIV pain; non-cardiac chest pain; irritable bowel syndrome; bowel disorder.
                                                                                                       GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                            TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTGTTAAGTAGCCTTTATCCCCA
                                                                               GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 p11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene; voltage gated sodium channel; VGSC; Navl.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human cDNA encoding small calcium binding protein pli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Malik-Hall M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 102-103; 114pp; English
                                                                                                                                                                                                                                                625
                                                                                                                                                                                                                                                                                     27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wood JN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                        CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                CTGGACGCGGGGGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /product= "p11"
                                                                                                                                                                                                                                                                                                                                                                             104/c
ABX13104 standard; cDNA; 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-AUG-2002; 2002WO-GB003852.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-AUG-2001; 2001GB-00020238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Poon L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UNICO ) UNIV COLLEGE LONDON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        112. .405
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2003-278589/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Okuse K, Baker M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-278589/;
P-PSDB; ABG76194.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003016917-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-MAY-2003
                                        230
                                                                                                                                                                                                       110
                                                                                                                                                                                                                                                                                                                                                                                                                                    ABX13104;
  421
                                                                                                                      170
                                                                                                                                                              541
                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                       51
                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human;
                                                                                                                                                                                                                                                                                                                                                   RESULT 12
ABX13104/
XX
ABX13104/
XX
ABX1
XX
ABX1
DABX1
XX
DE Huma
XX
Huma
XX
Huma
XX
Huma
XX
Huma
XX
Homo
XX
XX
                              원 수 명
                                                                                                                                                                                          g
ò
                                                                                                                                               ઠે
                                                                                                                                                                                                                                   ठे
                                                                                                                                                                                                                                                                            셤
```

```
compound identified by a method above, a host cell capable of expressing a VGSC and a pll peptide (where the VGSC and/or peptide ll is expressed from one or more heterologous expression vectors within the cell), treating a disorder or condition associated with the activity of a voltage gated sodium channel (by administering to an individual a compound identified by the method above, or an inhibitor of pll activity of a compound identified as modulator of VGSC. Compounds identified as modulator of VGSC are useful for manufacturing a medicament for modulating the functional expression of a voltage gated sodium channel, for producing analgesia and for relieving chronic pain such as osteoarthritis, rheumatoid arthritis, neuropathic pain, cancer pain, tri geminal neuralgia, primary and secondary hyperalgesia, inflammatory pain, nociceptive pain, tabes dorsalis, phantom limb pain, copinal cord injury pain, central pain, post-herpetic pain and HIV pain, non-cardiac cheet pain, irritable bowel syndrome and pain associated with bowel disorders. The present sequence encodes human pll
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAACTAAAAAAGAACTTTATTATTATTGAGGGCAAGGGGATGCAAACAATACAAAAAATACAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          170 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               290 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAGGTCCTTCATTTTTGTCCACAGCCCAGGGGTCTTTTTGATTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 50.1%; Score 601; DB 10; Best Local Similarity 99.7%; Pred. No. 7.5e-142; Matches 623; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGACGCGGGGGGGAGAGCGAGC 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 13
ADR24986/c
1D ADR24986 standard; DNA; 649
XX
AC ADR24986;
```

22

```
The present invention describes an isolated PRO nucleic acid (I). Also described: (1) a vector comprising (I); (2) a host cell comprising the vector of (I); (3) a process for producing a PRO polypeptides; (4) an isolated PRO polypeptide; (5) a chimeric molecule comprising the polypeptide of (4) fused to a heterologous amino acid sequence; (6) an antibody which specifically binds to a polypeptide of (4); (7) a composition of matter comprising a polypeptide of (4), an agonist or antagonist of the polypeptide or an antibody that binds to the antagonist of the polypeptide or an antibody that binds to the confinence compisation with a carrier; (8) an article of maunfacture comprising a container, a label on the contenier and a composition of matter of (7); (9) a method of treating an immune related disease in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRO polynucleotides and polypeptides, useful in useful in diagnosing treating an immune related disease, e.g. systemic lupus hematosus, rheumatoid arthritis, diabetes mellitus or asthma and in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human; PRO; immune related disease; inflammatory immune response; immune response stimulation; antiallergic; antianaemic; antiarthritic; antiasthmatic; antidiabetic; antiinflammatory; antipsoriatic; antithyroid; CNS; dermatological; gastrointestinal; haemostatic; hepatotropic; immunostimulant; immunosuppressive; muscular; nephrotropic; neuroprotective; osteopathic; respiratory; vasotropic;
                                                                                                                                                          290 TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                       230 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTTTAGTTAAGTAGCCTTTATCCCCA
                                                                                                                               481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                  Williams PM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Schoenfeld J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; SEQ ID NO 101; 3009pp; English.
                                                                                                                                                                                                                                                                                                     625
                                                                                                                                                                                                                                                                                                                              CTGGACGCGGGCGGAGAGGCGAGC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PRO cDNA sequence SEQ ID NO:101
                                                                                                                                                                                                                                                                                                     CTGGACGCGGGGGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gurney AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             virucide; gene therapy; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               stimulating an immune response
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADP54125 standard; cDNA; 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-OCT-2003; 2003WO-US034381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-OCT-2002; 2002US-0422472P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Clark H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-376182/35.
P-PSDB; ADP54126.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wu TD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2004039956-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      erythematosus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Aggarwal s
Wood WI,
                                          421
                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                              51
                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADP54125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New PRO
                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 14
ADP54125/c
                                                                                유
                                                                                                                                                               a
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                           ò
                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a method of classifying a breast cancer patient according to prognosis by determining the similarity between the level of expression of each of five genes for which markers are listed in the specification, in a cell sample taken from the breast cancer patient, to control levels of expression for each respective five genes to obtain a patient similarity value. The methods are useful for classifying a breast cancer patient according to prognosis. Kits and computer program products are useful for data analysis using the diagnostic, prognostic and statistical methods of the invention. This sequence corresponds to a marker used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCAGGTCCTTCATTATTTGTCCACAGGCAGAGGGTCTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GIGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATICCTIAAGCGACCCTITGGGACAACTCTIATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITACATITIGCIAAGIGICCIGAICTGCICAIGAAAICCIICIAIGGGGGAAGCIGIGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Classifying a breast cancer patient according to prognosis comprises determining the similarity between the level of expression of each of five genes in a cell sample taken from patient, to control levels.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   50.1%; Score 601; DB 13; Length 649; 99.7%; Pred. No. 7.5e-142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                       ds; breast cancer; prognosis; gene expression; diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; SEQ ID NO 847; 226pp; English.
                                                                 Breast cancer prognosis marker #847.
                                                                                                                                                                                                                                                                                                                                                                  ROSETTA INPHARMATICS LLC. NETHERLANDS CANCER INST.
                                                                                                                                                                                                                                                                               15-JAN-2004; 2004WO-US001100.
                                                                                                                                                                                                                                                                                                                         L5-JAN-2003; 2003US-00342887.
                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 623; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                   He Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-593473/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                            WO2004065545-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Van't Veer LJ,
                      21-OCT-2004
                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                  (ROSE-)
(NECA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
```

g

ò g ò

ð 유 ò g

임

ò

8

ò

```
mammal; (10) a method for determining the presence of a PRO polypeptide in a sample suspected of having the polypeptide; (11) a method of discussion an immune related disease or an inflammancry immune response in mammal; (12) a method of identifying a compound that inhibits or mimics the activity of or expression of a gene encoding a PRO polypeptide; and (13) a method of stimulating the immune response in a mammal. The PRO sequences have antialersic, antiansemic, antiarthritic, antiathyroid, antiansemic, antiarthritic, antiathyroid, CNS, dermatological, gastrointestinal, hemostatic, hepatotropic, immunostimulant, immunosuppressive, muscular, nephrotropic, neuroprotective, osteopathic, respiratory, vasotropic and virtuities, and encoded polypeptides, compositions, kits and methods are useful in diagnosing and treating an immune related disease and in the one control of the service of the servic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITACATITIGCTAAGIGICCTGAICIGCTCAIGAAAICCTICIAIGGGGGAAGCIGIGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       290 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Trecrerescerrenaecerrescesasses 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rcreccracricrircccricrecricargracracaaaaragrearigearig 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGAACTAAAAAAGAACTTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGAGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGTGTGTGTCGTTGAAGCCTTGG-CGAGCGCGGGGGGGAGCTGGGGCGAGCTGGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 50.1%; Score 601; DB 13; Length 649; Best Local Similarity 99.7%; Pred. No. 7.5e-142; Matches 623; Conservative 0; Mismatches 0; Indels ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                         stimulating an immune response. The present sequence PRO nucleotide sequence from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGACGCGGGGGGGAGGCGAGC 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                51
           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

1592/c ADS17592 standard; cDNA; 649 BP.

RESULT 15 ADS17592/c ID ADS17 XX AC ADS17

ADS17592

```
The specification describes a method for quantitatively determining neurite outgrowth in a population of neuronal cells. The method comprises contacting a population of neuronal cells with a detection reagent capable of detecting annexin II, detecting an amount of annexin II in the population of neuronal cells, and determining a quantitative amount of neurite outgrowth in the population of neuronal cells based on the amount of annexin II. The method is useful for detecting neurite outgrowth and for screening compounds that modulate neurite outgrowth or that may be used to prevent or treat diseases and conditions relating to neurodegeneration, such as Alzheimer's disease, Parkinsonian syndromes, brain injuries or stroke. The present sequence encodes the pl1 subunit of human annexin II. The pl1 nucleotide sequence can be detected using the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Determining neurite outgrowth in a population of neuronal cells comprises detecting the amount of annexin II in the population of neuronal cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITACATITIGCIAAGIGICCIGAICIGCICAIGAAAICCITCIAIGGGGGAAGCIGIGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GGAACTAAAAAAGAACTTTATTTATTGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGATICCITAAAGCGACCCTTIGGGACAACTCTTAICAGGGAGGAGGAACTGCTCATI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGATTCCTTAAGCGACCCTTT-GGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                    neurite outgrowth; neuronal cell; annexin II; neurodegeneration;
Alzheimer's disease; Parkinsonian syndrome; brain injury; stroke;
pll subunit; human; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 601; DB 13; Length 649;
Pred. No. 7.5e-142;
0; Mismatches 0; Indels 2
                                                                                                                                                                                                                             /product= "pl1 subunit of human annexin II"
                                              Nucleotide sequence of the pll subunit of human annexin II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 649 BP; 197 A; 162 C; 137 G; 153 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                               X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure, SEQ ID NO 3; 67pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                               Ding
                                                                                                                                                                                                                                                                                                                                                                                              (BGHM ) BRIGHAM & WOMENS HOSPITAL INC.
                                                                                                                                                                             Location/Qualifiers
112. .405
                                                                                                                                                                                                                                                                                                                                                                                                                               Cuny GD, Padmanaban D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              50.1%;
                                                                                                                                                                                                                                                                                                                             13-MAR-2004; 2004WO-US007749
                                                                                                                                                                                                                                                                                                                                                              13-MAR-2003; 2003US-0454254P
               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 99.7
Matches 623; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-668882/65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P-PSDB; ADS17593
                                                                                                                                                                                                                                                            WO2004080424-A2
                                                                                                                                                sapiens
                                                                                                                                                                                                                                                                                              23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                               ij
                                                                                                                                                Homo
                                                                                                                                                                               Key
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

```
The invention relates to 2175 novel human ovarian antigens (ABP41054-ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also encompasses polypeptides 90% identical and polypucleotides 95% identical to the sequences of the invention. The invention additionally relates to recombinant vectors and host cells comprising human ovarian antigens and the use of vovarian antigens, antibodies against human ovarian antigens, and the use of ovarian polymucleotides and polypeptides in diagnosing, treating, prognosing or preventing various ovary and/or breast-related disorders. Such conditions include ovarian cancer and breast cancer, and metastatic tumucus for ovarian or breast origin, reproductive system disorders (e.g., infertility, disorders of pregnancy, anovulation, cdisorders, infertility, immune disorders (e.g., cnagnitial and acquired disorders (e.g., immune ophoritis, systemic lupus erythematosus), closoders (e.g., anaemia), cardiovascular disorders and uninary system disorders, neurological disorders, gastrointestinal disorders cand uninary system disorders. Ovarian antigen polypoptides may also be used in screening for compounds which modulate ovarian antigen expression or activity. The polynucleotides may also be used in screening for compounds which contings may be used as food additives or to prepare antibodies cuseful in disease diagnosis, drug targeting and phenotyping. The present convertion. Note: The sequence tepresents cDNA encoding a human ovarian antigen parent died not form part of the printed specification, in the man ovarian antigen of the printed specification, in the pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181 GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAG 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           crecciacircrircriciticareristraciacaaaaracreatrecarecaares 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 CCAĞGTCCTTCATTATTTTGTCCACAGCCCAGAGGCTCTTTTTGATTTTCCAAAAATCCAG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  542 TGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAGC 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGATICCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 GAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCTTATCTGGTATTTAACTTTTCTTTTCTGCTTGTCAAATGAGAGTTAGATTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGGAGCGAACTGCTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301 TGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 663 BP; 213 A; 148 C; 144 G; 152 T; 0 U; 6 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 595.8; DB 6;
Pred. No. 1.6e-140;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 99.5%;
Matches 597; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        302
            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Isolated nucleic acid molecules encoding novel ovarian polypeptides, useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian cancer), immune disorders, cardiovascular disorders and neurological
                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                            GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATCCCCA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour; ovarian cancer; breast cancer; tumour; reproductive system disorder; infertility; pregnancy disorder; anovulation; polycystic ovary syndrome; PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder; infection; inflammatory condition; immune disorder; blood disorder; cardiovascular disorder; respiratory disorder; neurological disorder; gestrointestinal disorder; urinary system disorder; drug screening; gene therapy; chromosome mapping; forensic analysis; antibody preparation; cytostatic; immunomodulatory; neuroprotective; antiinflammatory; gynaecological; reproductive; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                               25
      rccaggrccrrcarrarrrgrccacagagagagarcrrrrgarrrccaaaaarcca
                                                                                                                                                                                                                                      GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                              TTGGTGTGTGGTGGAAGCCTTGAAGCCTTGG-CGAGGCGCGGACGCTGGGCGAGCTGGGGCGAG
                                                                                                            Greadecececantradegaaaaagareregaageeeacritiecearereracaered
                                                                                                                                                   TCCAGGTCCTTCATTTTTGTCCACAGGCGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                     GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                      TTGGTGTGGTCCGTTGAAGCCTTGGCCCAGGCGCGCGCGGCGGACGCTGGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human ovarian antigen HCOOI71 cDNA, SEQ ID NO:1114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 1114; 2922pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGACGCGGGCGGAGAGGCGAGC 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGACGCGGGCGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             234/c
ABQ55234 standard; cDNA; 663 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-JUN-2001; 2001WO-US018569.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-JUN-2000; 2000US-0209467P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Birse CE, Rosen CA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002-147878/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-147878/
P-PSDB; ABP42157.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200200677-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-JAN-2002.
                                                                                                               350
                                                                                                                                                       361
                                                                                                                                                                                            290
                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                               110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                      301
                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                              음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                       ठे
                                                                                                    8 S
                                                                                                                                                                               셤
                                                                                                                                                                                                                         8 8
                                                                                                                                                                                                                                                                                                  ò
```

61

; 0

Indels

Length 663;

242

421

481

541

62

```
61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 18
                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                              셤
                                                                                                                                                         8
                                                                                                                                                                                                  අ
                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA46656-67 represent differentially expressed human genes, associated with disease states and disorders. The specification describes methods preventing, diagnosing and treating cardiac, kidney and inflammatory diseases associated with inappropriate expression of differentially expressed cardiac, kidney and inflammatory genes (e.g. AAA46556-67). These genes include 1-8U, prostacyclin-stimulating factor, isf-2, tissue specific mRNA, insulin-like growth factor binding protein 6, OSF-1, gas-1, YMP, BTG2, pre-B cell stimulating factor homologue (SDP1a), peripheral benzodiazephne receptor, and cellular ligand of annexin II (pil), crespectively. These diseases include congenital heart failure, dilated congestive cardiomyopathy, hypertrophic cardiomyopathy, restrictive cardiomyopathy, mitral valve disease, acriic valve disease, tricuspid arthythmia, pulmonary hypertension, arterial hypertension, renovascular hypertension, arterial hypertension, removascular hypertension, arterial hypertension, removascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                   inflammatory disease; I-8U; prostacyclin-stimulating factor; isf-2; isf-2; issue specific mRNA; insulin-11ke growth factor binding protein 6; OSF-1; gas-1; YMP; BTG2; pre-B cell stimulating factor homologue; SDF1a; peripheral benzodiazepine receptor; annexin II cellular ligand; pl1; congenital heart failure; dilated congestive cardiomyopathy; hypertrophic cardiomyopathy; restrictive cardiomyopathy; mitral valve disease; actic valve disease; tricuspid valve disease; angina pectoris; myocardial infarction; cardiac arrhythmia; pulmonary hypertension; arterial hypertension; renovascular hypertension;
Differentially expressed human gene; cardiac disease; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Preventing, diagnosing and treating cardiac, kidney and inflammatory disorders using cardiac genes that are differentially expressed in disease states such as cardiac arrhythmia and arteriosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Schreiner
                                                                                                                                                                                                                                                                                                                                                                  of a human gene encoding cellular ligand of annexin II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 557; DB 3; Length 579;
Pred. No. 1e-130;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 579 BP; 185 A; 127 C; 124 G; 143 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lewicki JA, Joly A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 arteriosclerosis; atherosclerosis; cardiac tumour; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Fig 5L; 170pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Damm DL,
                                                                                                                                                                                     BP.
                                                                                                                                                                                     AAA46667 standard; cDNA; 579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99WO-US029941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0113008P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    46.58;
                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              White RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-451904/39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SCIO-) SCIOS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200035473-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-DEC-1999;
                                                                                                                                                                                                                                                                                                         25-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stanton LW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-JUN-2000
                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                  CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo
                                                                                                                       AAA466677,
AAA466677,
XXX AAA46677,
XXX AAA46,
XXX AAA46,
XXX Diff,
XXX BULM,
XX BULM,
XXX BULM,
                                  g
```

```
180
                                                                                                                        400
                                                                                                                                                                                              240
                                                                                                                                                                                                                                                           341
                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          colon cancer polypeptides and polynucleotides, useful as vaccines, diagnosing, preventing, and treating colon cancer, and as markers for progression of cancer.
                                                                                                                                                                                                                                                                                                                                                            GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCAGGTCCTTCATTATTTTGTCCACAGGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; colon tumour; vaccine; colon cancer; immunogenic; immunotherapy;
                                                                                                                               TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCAGGTCCTTCATTATTTTGTCCACAGGCAGAGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
   AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                          TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGGGAC 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TIGGIGICGIIGAAGCCIIGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cDNA encoding colon tumour protein, SEQ ID No 890.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Secrist
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-AUG-2000; 2000US-0223283P.
28-MAR-2001; 2001US-0279763P.
29-JUN-2001; 2001US-0302051P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-JUL-2001; 2001WO-US024218.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ρ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABK45339 standard; cDNA; 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     χņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Meagher MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-241739/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CORI-) CORIXA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200212328-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-FEB-2002
519
                                                               121
                                                                                                                           459
                                                                                                                                                                                           181
                                                                                                                                                                                                                                                           399
                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                      340
                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABK45339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 King GE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New
for
the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABK45339

XX

XX

XX

XX

XX

XX

DT

DE

CDNI

CDNI
```

Gaps

1 GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA

Matches 579; Conservative

Similarity

Best Local

ઠ 8

```
The present sequence is one of a large number of 5' ESTs derived from mRNAs encoding secreted proteins. No ORF has yet been conclusively identified within the present sequence. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-df primed cDNA libraries. Such ESTs are not wall suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer CDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be used to obtain full length cDNAs with intact 5' ends and can therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic, gene therapy and chromosome mapping procedures.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               224 CAGAGGGTC--TTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAG 167
 sequence tag; secreted protein; cDNA isolation; mapping; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCTAAGTGTCCTGATCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGAAATCCTTCTATGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTCTTATCAGGGAGGGAACTGCTCATTTCTGCCTACTTCTTCCCTTCTGCTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      344 GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCCAATTAGGGAAAAGGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cregaagcccacrrrgccarcrracacregrccaggrccrrcarrarrrrgrccacagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                               New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for diagnostic, forensic, gene therapy and chromosome mapping procedures.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             They are used to obtain upstream regulatory sequences and to design
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 523; DB 3; Length 582;
Pred. No. 4.1e-122;
4; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 14898; 71pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 582 BP; 183 A; 135 C; 130 G; 129 T; 0 U; 5 Other;
                                                                                                                                                                                                                                                                           Giordano
                                                                                                                                                                                                                                                                           Duclert A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                expression and secretion vectors
                                                                                                                                                                   21-FEB-2000; 2000EP-00200610.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 97.9%;
Matches 547; Conservative
                  gene therapy; chromosome
   expressed
                                                                                                                                                                                                                                                                           Dumas Milne Edwards J,
                                                                                                                                                                                                                                                                                                               WPI; 2000-500381/45
                                                                                                                                                                                                                                         GEST ) GENSET
                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  390
   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                The invention relates to polynucleotides encoding colon tumour proteins. The polynucleotides and encoded polypeptides are useful in pharmaceutical compositions, such as vaccines, for the diagnosis, prevention, and treatment of colon cancer. Polynucleotide sequences may be used as hybridisation probes or primers, and in the design and preparation of ribozyme molecules for inhibiting expression of tumour polypeptides and proteins in tumour cells. The compositions are useful for stimulating an immune response against cancer, particularly for the immunotherapy of colon cancer, and as markers for the progression of cancer. ABK4450-ABK46237 represent coding sequences of human colon tumour proteins of the invention. Note: With the exception of SEQ ID No 1 and 2, the sequence data for this patent did not form part of the printed specification but was supplied by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAANAAGCTCTGGAAGCCCACTTTGCCATCTNTACACTGG 387
                                                                                                                                                                                                                                                                                                                                                                                                                                       87
                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTANATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGANATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                      GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                              Score 537; DB 6; Length 571;
Pred. No. 1.2e-125;
0; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                              Sequence 571 BP; 139 A; 115 C; 107 G; 203 T; 0 U; 7 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human secreted protein 5' EST, SEQ ID NO: 14898.
Claim 1; SEQ ID NO 890; 147pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        823/c
AAC10823 standard; cDNA; 582
                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 98.7%;
Matches 537; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGG 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                         28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAC10823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAC10823/
ID AAC1
XX AAC1
XX DT 06-O
XX DE Huma
XX
 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 & 8 &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
```

Gaps

4;

149

463

523

89

209 405 269 345 329 285 389 225

291 401 231

461 171 521

셤

õ 유

셤 ⋧

8

```
TAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTG 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to novel human GENSET coding sequences (ACC51060-ACC51115) and proteins (ABR48455-ABR48508). The GENSET sequences are useful for preparing a composition for treating GENSET related disorders. They can also be used as markers for tissues in which the corresponding protein is preferentially expressed, as molecular weight markers on Southern gels, as chromosome markers or tags to identify chromosomes, and as reagents in assays to quantitatively determined levels of GENSET expression in biological samples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCCATTTGAGATGGCATTTTGGTGTGGTCCGTTGAAGCCTTGGCCGGGCGCGGGGGCGTC
          ATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCAC
                                                TTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACGCCAGAGGGTCTTT
                                                                                                                                                                                                                                                                                                                                      rrearrinceaaaarceaeeeaacrecrrrrecareaeracrereaercerecrerer
                                                                                                                                                                                                                                                                       TIGATITICCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGT
                                                                                                                                                                                                                                                                                                                                                                                                           TAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New GENSET polynucleotides and polypeptides, useful for preparing a composition for treating GENSET-related disorders and as reagents is assays to quantitatively determined levels of GENSET expression in biological samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTGGGCGAGCTGGGCGAGCTGGACGCGGGGGGGGAGAGGC 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human S-100A10 Related Protein coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; GENSET; therapeutic; therapy; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 400-401; 505pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACC510607.

ID ACC510607.

XX
XX
ACC510609.

XX
ACC510609.

XX
BCC510609.

XX
Human S-100A10 Related Protein Connocapiens.

XX
Human, GENSET; therapeutic; ther.

XX
Homo sapiens.

XX
BOSO0294864-A2.

XX
ACS-NOV-2002.

XX
BOSO0294864-A2.

XX
BOSO01; 2001US-0298698P.

PR 13-UU-2001; 2001US-0298698P.

PR 29-UW-2001; 2001US-0398698P.

PR 29-UW-2001; 2001US-0398698P.

RR 13-UU-2001; 2001US-0398698P.

RR 13-UU-2001; 2001US-0398698P.

RR 13-UU-2001; 2001US-0398698P.

RR 13-UU-2001; 2001US-0398698P.

RR 29-UW-2001; 2001US-0398698P.

RR 13-UU-2001; 2001US-0398698P.

RR 25-MAY-2001; 2001US-0398698P.

XX
CHENSET POLYACESIIS) and proteins Proceed to Connocapiens and proceeding sequences are useful for proparing contracting sequences are useful for proparing sequences are useful for proparing contracting sequences are useful for proparing contracting sequences are useful for proparing contracting protein is precontracting protein is precontracting sequences are useful for proparing contracting protein is precontracting protein is precontracting contracting sequences are useful for proparing contracting protein is precontracting contracting protein is precontracting determined levels of GENSET exprecontracting determined levels of GENSET exprecontra
                                                                 350
                                                                                                                                   342
                                                                                                                                                                                                  290
                                                                                                                                                                                                                                                                       402
                                                                                                                                                                                                                                                                                                                                         230
                                                                                                                                                                                                                                                                                                                                                                                                        462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
      282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                             g
                                                                                                                                8
                                                                                                                                                                                 셤
                                                                                                                                                                                                                                               ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                ें
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                 107
                                                                                                                                   569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a method of inhibiting a cancerous phenotype of a cell comprises contacting a cancerous mammalian cell with an agent for inhibition of DKRZp5661133 activity. The methods are useful for treating cancer, e.g. breast cancer. This sequence represents a gene product which is differentially expressed in breast cancer cells. The sequence can be used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTATGGGGGAAGCTGTGGGGGCAGATTCCTTAAGCGACCTTTGGGACAACTCTTATCAAG 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGG 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Inhibiting a cancerous phenotype of a cell, useful for treating breast cancer comprises contacting a cancerous mammalian cell with an agent for inhibition of DKF2p5661133 activity.
                                                                                                                                TTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGTTGAAGCCTTGGCCGA
                                  TTCCATGGCGTGTTCCATTTGAATGGCATTTTGGTGTGCGTCCGTTGAAGCCTTGAGCCGGA
   GTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGAGAGTTAGATTTTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ds; cytostatic; gene therapy; DXFZp5661133 activity inhibitor; breast cancer; differential expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 530;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 530 BP; 160 A; 133 C; 124 G; 113 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   43.1%; Score 516.8; DB 10; Length llarity 99.6%; Pred. No. 1.5e-120; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Breast cancer differentially expressed gene product #76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 30; SEQ ID NO 76; 257pp; English.
                                                                                                                                                                                                                                                                    GCCGCGCCGCACGCTGGGC 588
                                                                                                                                                                                                                                                                                                                                  GCCGCGCGCTGTGCGC 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADKI1670/C

ID ADKI1670/C

XC

ADK11670;

XX

ADK11670;

XX

ADK11670;

XX

O6-MAY-2004 (first entry)

XX

Whereast cancer differentially examples as a cancer; differential eximal exim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        518;
                                                              991
                                                                                                                                510
                                                                                                                                                                                              106
                                                                                                                                                                                                                                                                570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             410
450
                                                                                                                                                                                                                                                                                                                                  46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
```

g

B &

යි සි

X S

g

ð D D

ò

8 6 ℰ

g

ઠે 8 ò g

ò a ઠે 용

```
The invention relates to an isolated polynucleotide comprising any one of 38043 cDNA sequences, appearing as ACH12789-ACH50831 whose sequence was determined by the technique of SBH (sequencing by hybridisation). Also included is a purified polypeptide comprising a sequence corresponding to a reading frame of the novel polynucleotide. The nucleic acid sequences are useful in diagnostics as expressed sequence tags (EST) for identifying expressed genes or for physical mapping of the human genome, in forensics, in assessing biodiversities, or in identifying mutations can sequence are also useful as hybridisation probes, as oligomers for PCR, for chromosome and gene mapping, in the recombinant production of protein, or in generating antisense DNA or RNA. The purified polypeptide is useful for generating antisense DNA or RNA. The present sequence is useful for generating antisense DNA or RNA. The present sequence for this patent did not form part of the printed specification, but was obtained in electronic format directly from USPTO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  477 récriercaaricacarracarrirarrirracarriceraagicrecidarerece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              152 TGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          357 TCTTATCAGGGAGGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           237 GGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       177 GAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCCAGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  392 GAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         117 cercentrargraderacertrareceeaccaartrergaaargraaacarearerrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                     New polynucleotide sequences obtained from various cDNA libraries, use hybridization probes, as oligomers for PCR, for chromosome and gemapping, in the recombinant production of protein, or in generating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
Jones LW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 477;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         92 IGCTIGICAAAIGAGAGITAGAITITIATITITACAITIGCTAAGIGICC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 477 BP; 158 A; 100 C; 109 G; 109 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
Dickson MC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       segdata.uspto.gov/sequence.html?DocID=20030073623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 429.4; DB 9;
Pred. No. 1.9e-98;
0; Mismatches 1;
                                                                                                                                                                   Claim 1; SEQ ID NO 21508; 44pp; English
Stache-Crain B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  멾.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match 35.8%;
Local Similarity 99.8%;
les 430; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADF79487 standard; DNA; 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  47
Labat I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCATGGCGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCATGGCGTCT
                                                                                                                                antisense DNA or RNA
                                    WPI; 2003-615964/58
Drmanac RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADF79487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADF79487/
ID ADF7
XX
AC ADF7
원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                 1953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1653
                                                                                           ö
                                                                                                                                                                                                                                                                                                     AGCGACCCTTTGGGACAACTCTTATCAGGGAGGGAACTGCTCATTTCTGCCTACTTC 1833
                                                                                                                                                                                                                                                                                                                                                                             ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC 1713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           372
                                                                                                                                                                                                        192
                                                                                                                                                                                                                                                                                                                                                       312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                 AAGTGTCCTGATCTCCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTA
                                                                                                                                                                                                                                          AAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGGGCAGATTCCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                               ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGTGCTCC
                                                                                                                                                                                                                                                                             AGCGACCCTTTGGGACAACTCTTATCAGGGAGGGAGCGAACTGCTCATTTCTGCCTACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTATTTTGCACACACCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ss; sequencing by hybridisation; SBH; expressed sequence tag; mapping; biodiversity; genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTTGAAGCCACCAGAGGTCCGAGGTCTGGGCAGGAAGAAAGGT 1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTTGAAGCCTTGGCCGAGGCGCGCGCGCCTGGGCGAGCTGGGCGAGCT 602
                                                                                           ö
                                                  Score 485.2; DB 8; Length 2016;
Pred. No. 2.6e-112;
0; Mismatches 28; Indels 0;
                 C; 428 G; 502 T; 0 U; 0 Other;
                                                                                                                                ICTCTGCTTGTCAAATGAGAGTTAGATTTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human endothelial cell cDNA #2429
                 625 A; 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JUL-2001; 2001US-00918995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JUL-2001; 2001US-00918995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACH34296 standard; cDNA; 477
                                                  40.5%;
llarity 94.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                            TATITAACTITICIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LABAT I.
STACHE-CRAIN B.
DICKSON M C.
JONES L W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DRMANAC R T.
                                              Query Match
Best Local Similarity
Matches 502; Conserv
                 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2003073623-A1
               Sequence 2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-APR-2003.
                                                                                                                                                                 2012
                                                                                                                                                                                                                                          1952
                                                                                                                                                                                                                                                                                                                1892
                                                                                                                                                                                                                                                                                                                                                                                          1832
                                                                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1592
                                                                                                                              73
                                                                                                                                                                                                      133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1532
                                                                                                                                                                                                                                                                             193
                                                                                                                                                                                                                                                                                                                                                     253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACH34296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (STAC/)
(DICK/)
(JONE/)
```

418 211 358 271 298 331 391 178 451 118 511

DRMA/)

(LABA/)

Human; депоше

ACH34296/ ID ACH34296/ XX AC ACH3. XX DE Huma. XX DE Huma. XX BED HOMO. XX BED H

```
The invention relates to an isolated polynucleotide comprising any one of 38043 cDNA sequences, appearing as ACH12789-ACH50831, whose sequence was determined by the technique of SBH (sequencing by hybridisation). Also included is a purified polypeptide comprising a sequence corresponding to a reading frame of the novel polynucleotide. The nucleic acid sequences are asful in diagnostics as expressed sequence tags (EST) for identifying expressed genes or for physical mapping of the human genome, in forensics, in assessing biodiversities, or in identifying mutations responsible for genetic disorders and other traits. The nucleotide sequences are also useful as hybridisation probes, as oligomers for PCR, for chromosome and gene mapping, in the recombinant production of protein, or in generating antisense DNA or RNA. The purified polypeptide is useful for generating antisense DNA or RNA. The present sequence is one of the 38043 isolated cDNA/RST sequences. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from USPTO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polynucleotide sequences obtained from various cDNA libraries, useful as hybridization probes, as oligomers for PCR, for chromosome and gene mapping, in the recombinant production of protein, or in generating
TITGIGAAAIGIAAACAICCAIGGITITCCAIGGCGIGITCCAITIGAGAIGGCAITIIGGI 545
                                                                                                                                                                                                                                                                                                                                                                                                          expressed sequence tag; EST;
                        TTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jones LW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 35.2%; Score 422; DB 9; Length 466; Best Local Similarity 100.0%; Pred. No. 1.4e-96; Matches 422; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 466 BP; 142 A; 102 C; 108 G; 106 T; 0 U; 8 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dickson MC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        seqdata.uspto.gov/sequence.html?DocID=20030073623
                                                                                                                                                                                                                                                                                                                                                                                                        Human; ss; sequencing by hybridisation; SBH; e:
genome mapping; biodiversity; genetic disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 12556; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Stache-Crain B,
                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JUL-2001; 2001US-00918995.
                                                                                                                                                                                                                                   ACH25344 standard; cDNA; 466
                                                                                                                                                                                                                                                                                                                                                                Human adult ovary cDNA #3724.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JUL-2001; 2001US-00918995
                                                                                  GIGGICCGIIGAAGC 560
                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                               GIGGICCGIIGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LABAT I.
STACHE-CRAIN E
DICKSON M C.
JONES L W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Labat I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense DNA or RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DRMANAC R T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-615964/58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003073623-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                       13-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Drmanac RT,
                                                                                                                                                                                                                                                                             ACH25344;
486
                                        75
                                                                                    546
                                                                                                                          15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DICK/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DRMA/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (STAC/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (LABA/)
                                                                                                                                                                                                               ACH25344/c
                                                                                                                                                                                             RESULT
                                                                                                                                                                                                                                       셤
                                                                                                                 요
                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        126 ATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TICCITAAGCGACCCITITGGGACAACTCTTAICAGGGAGGAGCGAACTGCTCATTTCTGC 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCCTTCATTATTTGTCCACAGGCAGAGGGTCTTTTGATTTTCGAAAAATCCAGGGAA 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGA 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAG 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGAA 485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         255 GCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAG 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Greerrearrarrarceaeaeceaeaegererrirrearrireaaaaarceaeaeaa 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a method (M1) for determining the subtype of leukaemia cells and whether a patient sample contains leukaemia cells. The method comprises determining the expression profile of a group of markers in a patient sample. The method is useful for determining the presence of leukaemia cells, its types or subtypes, and for the preparation of a medicament for treating leukaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAA 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Determining the subtype of leukemia cells and whether a patient sample contains leukemia cells or other cells, useful for treating leukemia, comprises determining the expression profile of a group of markers in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dugas M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Schnittger S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   35.3%; Score 423; DB 10; Length 434; 99.8%; Pred. No. 7.7e-97; ive 0; Mismatches 0; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 434 BP; 139 A; 96 C; 102 G; 97 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kohlmann A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 43; 2938pp; English
                                                                                                      Cytostatic; Gene therapy; leukaemia; ss
                                                                                                                                                                                                                                                                                                                                                                             DEUT KREBSFORSCHUNGSZENTRUM.
UNIV LUDWIG MAXIMILIANS.
HAFERLACH T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              naieriach T, Schoch C, Kern W, E
Eils R, Brors B, Mergenthaler S;
                                                         Leukaemia-related DNA seguence #43
                                                                                                                                                                                                                                                                           04-NOV-2002; 2002WO-EP012303
                                                                                                                                                                                                                                                                                                                   05-NOV-2001; 2001EP-00126244
30-APR-2002; 2002EP-00009758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 434; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-505037/47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                             (DEXR-) DEUT KREBS
(UYLU-) UNIV LUDWI
(HAFE/) HAFERLACH
(SCHO/) SCHOCH C.
(KERN/) KERN W.
                                                                                                                                                                                      WO2003039443-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       patient sample.
                                                                                                                                              Unidentified.
                    26-FEB-2004
                                                                                                                                                                                                                                 LS-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local
```

셤

8 ò 셤 ò a ð a

8

ö

Gaps

ö

Gaps

180

239 240 179 300 119

29

299

359

9

g

õ

8 8 8

8 8 8 8

g

8 8 ò 용 à 셤

```
AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAH12943 to AAH17195 and AAG73514 to AAG77788 represent human colon cancer-associated nucleic acid molecules (N) and proteins (P), where the proteins are collectively known as colon cancer antigens. The colon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acids encoding 4277 human colon cancer-associated polypeptides, useful for preventing, diagnosing and/or treating colorectal cancers.
                                                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                        178 CTGCCTACTTCTTCCCTTCTGCTTCATGTACTACAAAATAGTCATTGCAAGC
                                                                                                                                                                                                                                                                                                                                                                       GTGAGGCCCGCAATTAGGGAAAAGAACTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                     1 GGAACTAAAAAGAACTTTATTTATTGGGCCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                           GCAGATICCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                        GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                   Human, colon cancer; colon cancer antigen, diagnosis, detection; colorectal carcinoma; chromosome 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                               TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCC 411
                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                            æ
                                                                                                                                                                                                                                                                                                                                                                                                                               TCCAGGTCCTTCATTATTTTTCCCACAGAGGGTCTTTTTGATTTTCC
             Length 441;
                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human colon cancer antigen encoding cDNA SEQ ID NO:2408
             34.3%; Score 411; DB 4; 100.0%; Pred. No. 8.5e-94; iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 3960; 9803pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Birse CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-0157137P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAH35326 standard; cDNA; 632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-SEP-2000; 2000WO-US026524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                          Best Local Similarity 100.
Matches 411; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Barash SC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-235357/24.
P-PSDB; AAG75921.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200122920-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-SEP-1999;
03-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ruben SM,
                                                                                                                            61
                                                                                                                                                        358
                                                                                                                                                                                    121
                                                                                                                                                                                                                298
                                                                                                                                                                                                                                                                        238
                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                      118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAH35326;
                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                            28
                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                              엄
                                                                                                                            δ
                                                                                                                                                   g
                                                                                                                                                                                    ò
                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                        244
                                                                       ATTCCTTAAGCGACCCTTTGGGAACTCTTATCAGGAGGAGGAGCGAACTGCTTTCTG 347
                                                                                                                                           287
                                                                                                                                                                                                                                           544
              CATTIGCTAAGIGICCTGAICTGCTCATGAAAICCTICTAIGGGGGAAGCIGIGGGGCAG 407
                                                                                                                                                                                                   227
                                                                                                                                                                                                                                                                                      ACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGA 484
                                                                                                                                                                                                                                                                                                      CATITICCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAG 184
                                                                                                              GGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCA 364
                                                                                                                                                                                                                            GGTCCTTCATTATTTTGTCCACAGGCCCAGAGGGTCTTTTGATTTTCCAAAAATCCAGGGA 424
                                                                                                                                                                                                                                                                                                                                                                       47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acids encoding 13 human colon cancer associated polypeptides, useful for preventing, diagnosing and/or treating e.g. cancers (especially colon cancer), Parkinson's disease and diabetic retinopathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to 13 human colon cancer-associated proteins. These proteins and the nucleic acid encoding them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate colon cancer-associated protein expression
                                                                                                                             GGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCA
                                                                                                                                                                                                                                                                                                                                           ATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGG
                                                                                                                                                                                                                                                                                                                                                           ATTTGTGAAATGTAAACATCGTGTTTCCATGCCGTGTTTCCATTTGAGATGGCATTTTGG
                                                      ATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGGAACTGCTCATTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 441 BP; 158 A; 87 C; 89 G; 107 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human colon associated protein cDNA sequence #16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Page 314; 326pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; colon; cancer; disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                  TG 546
                                                                                                                                                                                                                                                                                                                                                                                                                            TG 45
                                                                                                             245
125
                          466
                                                      185
                                                                                  406
                                                                                                                                         346
                                                                                                                                                                     305
                                                                                                                                                                                                286
                                                                                                                                                                                                                             365
                                                                                                                                                                                                                                                         226
                                                                                                                                                                                                                                                                                      425
                                                                                                                                                                                                                                                                                                                166
                                                                                                                                                                                                                                                                                                                                            485
                                                                                                                                                                                                                                                                                                                                                                                                   545
                                                                                                                                                                                                                                                                                                                                                                                                                              46
```

```
22-NOV-2001
                                                                       Hansen R;
                                                                                                                                                                                                                                                                                                                   350
                                                                                                                                                                                                                                                                                                                                                         290
                                                                                                                                                                                                                                                                                                                                                                            393
                                                                                                                                                                                                                                                                                                                                                                                              230
                                                                                                                                                                                                                                                                                                                                                                                                                  453
                                                                                                                                                                                                                                                                                                                                                                                                                                    170
                                                                                                                                                                                                                                                                                                                                                                                                                                                        513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABI99809;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
    원
                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                           ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
cancer antigens have cytostatic activity and can be used in gene therapy and vaccine production. N and P may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate P expression. For example, N and P may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of P by expressing inactive proteins or to supplement the patient sown production of P. Additionally, N may be used to produce the colon cancer-associated Ps, by inserting the nucleic acids into a host cell and culturing the cell to express the proteins. N and P can be used in the prevention, diagnosis and treatment of colorectal sequences used in the exemplification of the present invention. N.B. Pages 666 to 682 and page 7053 of the sequence listing were missing at this companies of publication, meaning no sequences are present for SEQ ID NO:1027
                                                                                                                                                                                                  7
                                                                                                                                                                                                                                                                                                                                      237
                                                                                                                                                                                                                                                                                                                                                 GGGGCAGATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGGGGCGAACTGCTC 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                        417
                                                                                                                                                                                                                                                                    TTTACATTTGCT-AAGTGTCCTGAT--CTGCTCATGAAATCCTTCTATGGGGGAAGCTGT 177
                                                                                                                                                                                                                                                                                                            297
                                                                                                                                                                                                                                                                                                                                                                                                                 ATGGTGAGGCCCGCAATTAGGGAAAAAGAGCTCTGGAAGCCCACTTTGCCATCTCTACAC 357
                                                                                                                                                                                                                                                                                                                                                                                                                                     153
                                                                                                                                                                                                                                      GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAACCAATNCAAAATCAA 453
                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93
                                                                                                                                                                                                                                                                                                                                                                                                                             TTATTTATTGAGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                        AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                            GGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGAGGAGCGAACTGCTC
                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                  3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ds; cytostatic; gene therapy; DKFZp5661133 activity inhibitor; breast cancer; differential expression.
                                                                                                                                                                              DB 4; Length 632;
                                                                                                                                                           Sequence 632 BP; 191 A; 139 C; 137 G; 146 T; 0 U; 19 Other;
                                                                                                                                                                            Score 396.2; DB 4; Length
Pred. No. 5.5e-90;
0; Mismatches 16; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Breast cancer differentially expressed gene product #78.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCAGGGAACTCCTTTTCCATGAG
                                                                                                                                                                            33.0%;
Local Similarity 95.7%;
hes 424; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADK11672 standard; DNA; 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                       to 1052, 7921 and 7922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003057926-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-JUL-2003
                                                                                                                                                                                                                                      512 (
                                                                                                                                                                                                                                                                            452
                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                            238
                                                                                                                                                                                                                                                                                                                                                                                                                  298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           152
                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                  392
                                                                                                                                                                                                                                                                                                                                      178
                                                                                                                                                                                                                                                                                                                                                         332
                                                                                                                                                                                                                                                                                                                                                                                             272
                                                                                                                                                                                                                                                                                                                                                                                                                                     212
                                                                                                                                                                                                                                                                                                                                                                                                                                                       358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADK11672
                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                      임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                           ያ ያ
                                                                                                                                                                                                                                                                                                                               ठे
                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                                                                                                                                                                       8 S
                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             용
```

```
The invention relates to a method of inhibiting a cancerous phenotype of a cell comprises contacting a cancerous mammalian cell with an agent for inhibition of DKPZp566I133 activity. The methods are useful for treating cancer, e.g. breast cancer. This sequence represents a gene product which is differentially expressed in breast cancer cells. The sequence can be used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTG 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCCAG 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGGTCTTTTTGATTTTCCAAAAATCCCAGGAACTCCTTTTCCATGAGTACTCTCAGGTC 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTC 512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGC 572
                                                                                                                                                                                                                                                                                                                                         Inhibiting a cancerous phenotype of a cell, useful for treating breast cancer comprises contacting a cancerous mammalian cell with an agent for inhibition of DKFZp5661133 activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          333 GAAGCCCACTITGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAAACATCATGGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  273 TACTACAAATAGTCATTGCATGCATGCTGAGGCCCGCAATTAGGGAAAAGAAGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATGCCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGTTGAAAGCCTTGGCCGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29.0%; Score 347.4; DB 10; Length 350; 99.7%; Pred. No. 9.9e-78; ive 0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mouse; ischaemia; compressive ischaemia; occlusive ischaemia; vasospastic ischaemia; ischaemic condition; ischaemic disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mouse ischaemic condition related cDNA sequence SEQ ID NO:919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGGCGGACGCTGGGCGAGCTGGGCGACGCGGGGCGGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGGCGGACGCTGGGCGAGCTGGCTGGACGCGGGGGGGAGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 350 BP; 96 A; 94 C; 84 G; 76 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 30; SEQ ID NO 78; 257pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP
                                                            08-JAN-2002; 2002US-0345637P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABI99809 standard; cDNA; 600
08-JAN-2003; 2003WO-US000657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 99.7
Matches 348; Conservative
                                                                                                                                                                                                                                                                     WPI; 2003-577534/54.
                                                                                                                                (CHIR ) CHIRON COR!
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200188188-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-MAR-2002
```

us-10-735-577-16.rng

Page

67

597

10

```
The invention relates to a method of inhibiting a cancerous phenotype of a cell comprises contacting a cancerous mammalian cell with an agent for inhibition of DKF2956611313 activity. The methods are useful for treating cancer, e.g. breast cancer. This sequence represents a gene product which is differentially expressed in breast cancer cells. The sequence can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Inhibiting a cancerous phenotype of a cell, useful for treating breast cancer comprises contacting a cancerous mammalian cell with an agent for
CAAACCTGTGAAACGTAAGCATCATGGTTTCCATGGCGTGCTCCATTTGGGATGGCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      341 AATAGTCATTACATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGCAGAGGGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITGATITICCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161 TTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                            TGGTGTGGTCCGTTGAAGCCTTGG---CCGAGGCGCGGCGGACGCTGGGCGGAGCTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                    cytostatic; gene therapy; DKFZp5661133 activity inhibitor; ust cancer; differential expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 10; Length 341;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATAGTCATTGCATGCAATGGTGAGGCCCCGCAATTAGGGAAAAGAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                             Breast cancer differentially expressed gene product #77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 341 BP; 94 A; 94 C; 80 G; 73 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1e-75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 339.4;
Pred. No. 1e-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 30; SEQ ID NO 77; 257pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cancer comprises contacting a cancer
inhibition of DKFZp5661133 activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        used in the method of the invention.
                                                                                                                                                                                                                  ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-JAN-2003; 2003WO-US000657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-JAN-2002; 2002US-0345637P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28.3%;
ilarity 99.7%;
Conservative
                                                                                                                                                                                                                    DNA; 341
                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-577534/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CHIR ) CHIRON CORP
                                                                                                                                                                                                                  ADK11671 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
nes 340; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003057926-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                   06-MAY-2004
                                                                 542
                                                                                                                                                                                                                                                            ADK11671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hansen R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        221
                                                                                                           99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                        RESULT
                                                                                                                                                                                                                                      ò
                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes a method for examining ischaemic conditions, comprising measuring the expression levels of particular genes (I) in a test sample or determining the expression profile of a gene group in the sample or determining the expression profile of a ischaemia, occlusive ischaemia or vasospastic ischaemia) by measuring expression levels of particular genes (ABI99202 to ABI99912, encoding the protein sequences in ABB57020 to ABB57174) or by determining the expression profile of a gene group comprising these genes. The expression livels or expression profiles produced by these genes are used as an indicator when screening for ischaemic condition-improving drugs or therapeutics for ischaemic diseases. ABI99913 and ABI99914 represent PCR primers for a mouse ischaemic condition related sequence, which are used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ů.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGATCCTTTTGATTTTCCAAAAACCCAG 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     67 ATCTGGTAT----TTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTTTTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACTCCCGTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTGGTCTTTGTCGCCTG 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      182 CGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTT 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99
                                                                                                                                                                                                                                                       Examining the ischemic condition (e.g. occlusive ischemia) by measuring expression levels of particular genes defined in the specification or by determining the expression profile of a gene group comprising these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAAAAGGACTTTCTTTATTGAGGGCAATGGGATGCAAACAATATAAAAACTCAGAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CICTGCCATTGGATTAAGTTTTCTCTCTCAGATTGTTGAATTGGAGTTGGATCTCATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGATTCCTTAAGCGACCCTTTGG-GACAACTCTTATCAGGGAGGGAGCGAACTGCTCATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAGGCCCGCAATTAGGGAAAAAAAGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAGCCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTGCCATCTCGGCACTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAGGTCCTTCATTTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u> Adahiricercandrancecercercandancecercandencecercandence</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 600 BP; 165 A; 140 C; 151 G; 144 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score Jacob,
Pred. No. 1.18-76;
Wismatches 99; Indels
                                                                                                                                                     Ishii Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28.7%; Score 343.6; DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the exemplification of the present invention
                                                                                                                                                  Nagata T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                       (UYNI-) UNIV NIHON SCHOOL JURIDICAL PERSON
                                                                                                                                                                                                                                                                                                                                                              Claim 2; Page 2323-2324; 2690pp; English.
                                                                                                                                                  Takahashi Y,
                        18-MAY-2001; 2001WO-JP004192
                                                               2000JP-00145977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 79.6%;
Matches 476; Conservative
                                                                                                                                                  Asai S,
                                                                                                                                                                                            2002-034733/04.
                                                                                                                                                                                                                P-PSDB; ABB57331
                                                               18-MAY-2000;
                                                                                                                                                  Ishikawa K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              302
                                                                                                                                                                                                                                                                                                                         geneg
```

용 ò qq

ð

ద

ò

ò

원 상 ద 8 ò 음 ò 유 δ

õ

ö

```
BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-SEP-2000; 2000US-00670756.
31-OCT-2000; 2000US-00703094.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-SEP-2001; 2001WO-US030463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-AUG-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABK72684 standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           monse;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200226984-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABK72684;
                                                                                                                                                                                                                                                                                                                                                                                                                                 543
            ^
                                  569
                                                        67
                                                                                                                           449
                                                                                                                                                                        404
                                                                                                                                                                                                                      348
                                                                                                                                                                                                                                           303
                                                                                                                                                                                                                                                                  288
                                                                                                                                                                                                                                                                                          363
                                                                                                                                                                                                                                                                                                                228
                                                                                                                                                                                                                                                                                                                                     423
                                                                                                                                                                                                                                                                                                                                                             168
                                                                                                                                                                                                                                                                                                                                                                                    483
                                                                                                                                                                                                                                                                                                                                                                                                           108
                                                                                                                                                                                                                                                                                                                                                                                                                                                      48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABK72684/c
ID ABK726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 31
                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
             8 8
                                                       8
                                                                         셤
                                                                                                   8
                                                                                                                       g
                                                                                                                                                 8
                                                                                                                                                                   g
                                                                                                                                                                                             ò
                                                                                                                                                                                                              g
                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence encodes a potassium channel interactor protein (PCIP). The PCIP polypeptides bind to a potassium channel, modulate the activity of a potassium channel protein, and/or modulate a potassium channel mediated activity in a cell. The polymucleotides and polypeptides are useful in the treatment of epilepsy, and spinocerebellar ataxia, as well as nervous system related disorders and cardiovascular disorders associated with abnormal transient outward currents. They are also useful for identifying compounds which can bind to and modulate the expression and function of the PCIP nucleic acid molecules, and proteins
                                                                                                                                                                                                        Potassium channel interactor; PCIP; potassium channel; epilepsy; spinocerebellar ataxia; nervous system disorder; cardiovascular disorder; transient outward current; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New polynucleotide with homology to the sequence encoding phosphate channel interacting protein useful in the treatment of e.g. epilepsy and spinocerebellar ataxia.
cDNA sequence encoding a potassium channel interactor polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 600 BP; 193 A; 131 C; 137 G; 139 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 329.8; DB 3; Length
Pred. No. 3.6e-73;
0; Mismatches 107; Indels
                                                                                                                                                                                                                                                                                                                "potassium channel interactor"
                                  621
                                                CGCTGGGCGAGCTGGGCGACCTGGACGCGGGGCGGAGGC 1
                                  CGCTGGGCGAGCTGGCTGGACGCGGGGGGGAGAGGC
                                                                                                                                                                                                                                                                            Location/Qualifiers
52. .339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ling H, An W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Fig 32; 306pp; English
                                                                                                                  BB
                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0110033P.
98US-0110277P.
99US-00298731.
99US-00350614.
99US-00359913.
                                                                                                                 AAA46561 standard; cDNA; 600
                                                                                                                                                                                                                                                                                                                                                                                                           98US-0109333P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-00400492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
27.5%;
Best Local Similarity 77.8%;
Matches 458; Conservative
                                                                                                                                                                                                                                                                                                                                                                                    99WO-US027428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROD
                                                                                                                                                                                                                                                                                                     /*tag= a
/product=
                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MILL-) MILLENNIUM PHA
(AMHP ) AMERICAN HOME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000-400043/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Betty M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P-PSDB; AAY93492
                                                                                                                                                                                                                                                                                                                                        WO200031133-A2
                                                                                                                                                                                                                                                                                                                                                                                                                     25-NOV-1998;
30-NOV-1998;
23-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-JUL-1999;
09-JUL-1999;
21-SEP-1999;
21-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                    19-NOV-1999;
                                                                                                                                                             25-SEP-2000
                                                                                                                                                                                                                                                                                                                                                             02-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                           20-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rhodes K,
                                                                                                                                                                                                                                                        Rattus sp
                                  581
                                                       41
            101
                                                                                                                                      AAA46561
                                                                                           RESULT 30
AAA46561/
                                                                                                                           셤
                                 ઠે
```

Gaps

24;

```
510
                                                                     122
                                                                                                                                                                                                                                                          349
                                                                                                                                                                                                                                                                                                                                  289
                                                                                                                                                                                                                                                                                                                                                                       GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                                                                                                                                                                                                                                                                                                            229
                                                                                                                                                                                                                                                                                                                                                                                                                                                 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       542
                                                                                                        509 CICIGICALIGGAILAACILITICILICICIGCIIGICGAAILGGAGIIGGAIGILAILIG 450
                                                                                                                                                                                405
                                                                                                                                                                                                                     183 AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCTTTGTCAAGTAGTTTTTTTCCCCTGC 109
                                                                                                                                             123 TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGC 182
                                                                                                                                                                                                                                                                                               243 IGCCIACITCTITCCCTICIGCTICAIGIGIACIACAAAIAGICAITGCAIGCAAIGGI 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4
99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              central nervous system disorder; epilepsy; spinocerebellar ataxia; gene; cardiovascollar disorder; amnesia, Alzhaimer's disease; memory 1088; ss; affective disorder; aleep disorder; neurodegenerative disorder; stroke; depression; Parkinson's disease; multiple sclerosis; migraine; angina; psychiatric disorder; neurological disorder; arteriosclerosis; restenosis; heart failure; idiopathic cardiomyopathy; gene therapy; myocardial infarction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             monkey; potassium channel interacting protein; PCIP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGCCATTTT
                                                                       GAGCCCCCCCCACTAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGGICCTICATIATITIGICCACAGCCAGAGGGICTITITIGATITICCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGATTCCTCAGTTGACCCCATGGGAGGACGCATCAAGGTGTGGGGTACCAGGGC---T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA encoding rat potassium channel interacting protein (PCIP) #13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MILL-) MILLENNIUM PHARM INC
```

ABK63467 standard; cDNA; 573 BP.

```
The invention relates to an isolated potassium channel interactor protein (PCIP) and the polymucleotide encoding it. The DNA and protein sequences are useful for treating potassium channel associated disorders such as central nervous system (CNS) disorders, epilepsy, spinocerebellar ataxia, affective disorders, amnesia, Alzheimer's related memory loss, affective disorders, leep disorders, neurodegenerative disorders such as Alzheimer's disease, Parkinson's disease and multiple sclerosis, psychiatric disorders such as depression, neurological disorders such as migraine and stroke, arterisoslerosis, restenosis, heart failure, angina, represents cDNA encoding a PCIP of the invention. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         509 CTCTGTCATTGGATTAACTTTTCTTTCTCTGGTCGGAATTGGAGTTGGATTATTTG 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGATTCCTCAGTTGACCCCATGGGAGGGACGCATCAAGGTGTGGGTACCAGGGC----T 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     67 ATCTGGTAI----TTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               449 CACATTTCCTAAGGGTCCTGATCTGCTCA-------CACGAAGCAGTGGGGC 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   49
                                                                                                                          New isolated potassium channel interactor polypeptide, useful for
treating central nervous system disorder, epilepsy, spinocerebellar
ataxia, cardiovascular disorder, and nervous system related disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      348 CCAGTTGGCCTACTTCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGICTTICATIAITITIGICCACAGAGGGTCCTTTICATITICAAAAACCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGCCCCCCCACTAGTAGAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTAGTTTTTTTCCCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAATTTGTGAAATGTAAACATCATGGTTTCCATGCGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   108 AAACCIGIGAAAIGIAAGCAICAIGGITIICCAIGGCAIGCICCAITIGGGAIGGCAITIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 6; Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGCGACGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     daad-aarcrerreaaccredeccercaecececaercrirreaad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 600 BP; 193 A; 131 C; 137 G; 139 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tch al Similarity 77.8%; Score 329.8; DB 6; Length 6 al Similarity 77.8%; Pred. No. 3.6e-73; 458; Conservative 0; Mismatches 107; Indels
                      An W;
                                                                                                                                                                                                              Example 21; Fig 32; 259pp; English
                      Ling H,
                      Betty M,
                                                              WPI; 2002-416482/44
                                                                                    P-PSDB; ABG60611
                      Rhodes K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
```

```
Predicting toxic effects of compounds or the progression of these toxic effects by determining the changes in gene expression in tissues or cells exposed to the toxin and comparing these to gene expression in unexposed tissues or cells.
                                             Rat sequence differentially expressed in response to a hepatotoxin #1374.
                                                           Rat; ss; hepatotoxin; expressed sequence tag; EST; drug screening; differential expression; centrilobular necrosis; steatosis.
                                                                                                                                                                                                                                               Elashoff MR;
                                                                                                                                                                                                                                                Castle AL,
                                                                                                                                                                                                                                                Johnson KR,
                                                                                                                                                                2001US-0290645P.
2001US-0290645P.
2001US-0293736P.
2001US-0297457P.
2001US-029884P.
                                                                                                                                                  2000US-0222040P
2000US-0244880P
                                                                                                                                   30-JUL-2001; 2001WO-US023872
                              (first entry)
                                                                                                                                                                                                                                                 Porter MW,
                                                                                                                                                                                                                                 (GENE-) GENE LOGIC INC.
                                                                                                                                                                                                                                                                WPI; 2002-241625/29.
                                                                                     Rattus norvegicus.
                                                                                                   WO200210453-A2.
                                                                                                                                                                                                13-JUN-2001;
19-JUN-2001;
09-JUL-2001;
                                                                                                                                                                  11-MAY-2001;
15-MAY-2001;
                                                                                                                                                                                 22-MAY-2001;
06-JUN-2001;
                                                                                                                                                  31-JUL-2000;
02-NOV-2000;
                             18-JUN-2002
                                                                                                                                                                                                                                                 Mendrick D,
                                                                                                                   07-FEB-2002
```

The invention transfers to mentious for the production of these to specification of these to specification of these to specification of these to specification of a toxic effects by determining the compound and comparing these to gene expression in tissues or cells exposed to the concept of a compound or progression of a toxic effect, preferably the cells. Also included are methods of predicting at least one toxic effect of a compound or progression of a toxic effect, preferably the compound or progression of the genes is indicative of at least one toxic effect preferably. The method can also be used to identify an agent which modulates the toxic response and predict cellular pathways that a compound modulates the toxic response and predict cellular pathways that a compound modulates in a compount in kit form), where each of the probes comprises a sequence that specifically hybridises to a gene listed in the specification, a computer specifically hybridises to a gene listed in the specification, and a user interface to view the information used to present information identifying the expression level in a tissue or cell sample exposed to a hepatotoxin of a computer of genes comprising at least two genes listed in the specification, and a user interface to view the information used to present information identifying the expression level in the expression level in a fisue or cell of a least one gene containing information used to present information to the state of genes and a user interface to view the information used to present information changes in gene expression and for identifying toxicity markers in the project proving the project pagenes and the project proving the project pagenes and toxicity markers in dring presenting and toxicity assays. The genes and The invention relates to methods for predicting toxic effects of

Claim 1; SEQ ID NO 1374; 239pp; English

toxicity markers in drug screening and toxicity assays. The genes and gene expression information may be used as diagnostic markers for the prediction or identification of the physiological state of tissue or cell sample that has been exposed to a compound or agent. Hepatotoxicity is characterised by centrilobular necrosis and steatosis. The present sequence is an expressed sequence tag (EST) or cDNA derived from a gene which is differentially expressed in response to a hepatotoxic agent

```
Mendrick D,
                                                                                                                                                                                                                                                                                                                                                                          443
                                                                                                                                                                                                                                                                                                                                                                                                         398
                                                                                                                                                                                                                                                                                                                                                                                                                         243
                                                                                                                                                                                                                                                                                                                                                                                                                                         342
                                                                                                                                                                                                                                                                                                                                                                                                                                                        303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     102
유
                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                          | TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGGGC 182
                                                                                                                                                                                                       GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC 362
                                                                                                                                                                                                                                                                                                     ATCTGGTAI----TTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTT 122
                                                                                    CTCTGTCATTGGATTAACTTTTCTTTCTCTGCTTGTCGAATTGGAGTTGGATTATTTT 444
                                                                                                                           CACATTTCCTAAGGGTCCTGATCTGCTCA------CACGAAGCAGTGGGGC 399
                                                                                                                                          AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                  302
                                                                                                                                                                                  342 CCAGIIGGCCIACIICITCITCITCAIGIGIACIACAAAAAAAGCAIIGCAIGCAAIGAI 283
                                                                                                                                                                                                                 GAGCCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC 223
                                                                                                                                                                                                                                       CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                                                                                                                                CAGGICTITICATTATTITIGICCACAGAGGGICCTITIGATTITICAAAAACCCAGG 163
                                                                                                                                                                                                                                                                               AAAAAAAGACTTTCTTTATTGAGGGCAACGGATGCAAACAATATAAAACTCGAAAGCTC 504
                                                                                                                                                                                                                                                                      GAACTCCTTTTCCATGAGTACTCTCAGGTCCTTTTGTTAAGTAGCCTTTATCCCCAGC 482
                                              99
                                                                                                                                                                                                                                                                                                              7 AAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                         Gaps
                              24;
              Length 573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        profile; hepatotoxicity; liver;
BP; 171 A; 128 C; 137 G; 137 T; 0 U; 0 Other;
              Score 329.2; DB 6; Length Pred. No. 4.9e-73; Indels 0; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                    GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCT 584
                                                                                                                                                                                                                                                                                                                                              GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 toxicity assay; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Toxicity-related gene, SEQ ID 3611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2002US-00060087.
2002US-0364045P.
2002US-0364055P.
2002US-0436643P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         expression
              tch 27.5%; al Similarity 78.2%; 455; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2003WO-US003194
                                                                                                                                                                                                                                                                                                                                                                                    585/c
ADB58585 standard; DNA; 573
                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                screening;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003064624-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31-JAN-2002;
15-MAR-2002;
15-MAR-2002;
30-DEC-2002;
Sequence 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                          04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-AUG-2003
                                                                            67
                                                                                                                                                                                                                                                                                                      483
                                                                                                           123
                                                                                                                          443
                                                                                                                                                          398
                                                                                                                                                                         243
                                                                                                                                                                                                                       282
                                                                                                                                                                                                                                                                                                                                    543
                                                                                           503
                                                                                                                                          183
                                                                                                                                                                                                        303
                                                                                                                                                                                                                                        363
                                                                                                                                                                                                                                                      222
                                                                                                                                                                                                                                                                      423
                                                                                                                                                                                                                                                                                      162
                                                                                                                                                                                                                                                                                                                                                   42
               Query Match
                       Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Toxic;
                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  drug
                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                      8 6 8
                                                                                                                                                                                                                                                                                 g
                                                          a
                                                                           ò
                                                                                                     કે
                                                                                                                                                                    8 6 6 6
                                                                                                                                                                                                                                      8 6
                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                               ⋧
                                                                                                                                                                                                                                                                                                                                               셤
```

```
The present invention relates to a method for predicting a toxic effect of a compound. The method comprises preparing a gene expression profile of a tissue or cell sample exposed to the compound, and comparing the gene expression profile to a database comprising SEQ ID 1-4925, where differential expression of the gene indicates at least one toxic effect. The method is useful for predicting at least one toxic effect of a compound, predicting hepatotoxicity or the progression of a toxic effect of a compound, identifying an agent that modulates the onset or progression of a toxic response, predicting the cellular pathways that a compound modulates in a cell, and identifying an agent that modulates at least one activity of a protein. The method and compositions of the pression, are useful in identifying toxicity markers in liver tissues or cells for drug screening and toxicity assays. Note: The sequence data for this parent did not form part of the printed
                                                                                                                                                                                                                                                        Predicting a toxic effect of a compound, useful in identifying toxicity markers in liver tissues or cells for drug screening and toxicity assays, comprises preparing gene expression profile of tissue or cells exposed to the compound.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                         Ξ
                                                                                    Elashoff
                                                                                         Castle A,
                                                                                         m,
                                                                                    ніддв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 3611; 1156pp; English
                                                                                    Johnson K,
(GENE-) GENE LOGIC INC.
                                                                                         Porter M,
                                                                                                                                                                             WPI; 2003-689530/65
```

24; Query Match
27.5%; Score 329.2; DB 10; Length 573;
Best Local Similarity 78.2%; Pred. No. 4.9e-73;
Matches 455; Conservative 0; Mismatches 103; Indels 24; Sequence 573 BP; 171 A; 128 C; 137 G; 137 T; 0 U; 0 Other;

Gaps

4

Gaps

504 122 444 182 399 302 283 362 422

223

482

163

542

43

g ò

```
AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            toxicity; toxicity marker;
                                                                                                                                                                                                                                                                                                             503 cicigreatregaritaactiticititiciciecereficaatregaetregaretratite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 222 CAGGTCTTTCATTATTTTGTCCACAGGCGAGGGTCCTTTTGATTTTCCAAAAACCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               102 AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCATTTGGGATGGCATTTT
                                                                                                                                                                                                                      563 AAAAAAAGACTITCTITATIGAGGGCAACCGGAIGCAAACAATATAAAACTCGAAAGCTC
                                                                                                                                                                                                                                                                    67 ATCTGGTAT----TTAACTTTTCTTTCTTGTCAAATGAGAGTTAGATTTTATTTT
                                                                                                                                                                                                                                                                                                                                                        123 TACATITIGCTAAGTGTCCTGATCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                    443 CACATTTCCTAAGGGTCCTGATCTGCTCA------CAGGAAGCAGTGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          282 GAGCCCCCCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGGICCTICATIATITIGICCACAGCCAGAGGGICTITITIGATITICCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        483 GAATTIGIGAAAIGIAAACAICAIGGIITICCAIGGCGIGIICCAITTGAGAIGGCAITTI
                                                                                                                                                                             7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 423 GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGGCCCCCAATTAGGGAAAAAAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
  toxicity modelling related gene sequence from the present invention.
                                                                                                                                    24;
                                             Sequence 573 BP; 171 A; 128 C; 137 G; 137 T; 0 U; 0 Other;
                                                                                         DB 10; Length
                                                                                    Score 329.2; DB 10; Length
Pred. No. 4.9e-73;
0; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            543 GETGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGCGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Poxicity modelling related rat gene SEQ ID No 1883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Toxic effect; gene expression profile; renal toxic database; drug screening; toxicity assay; rat; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВР
                                                                                    27.5%;
nilarity 78.2%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-MAY-2001; 2001US-0292335P.
13-JUN-2001; 2001US-0297523P.
19-JUN-2001; 2001US-0298925P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-MAY-2002; 2002WO-US016173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABT42181 standard; DNA; 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200295000-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-JUN-2003
                                                                                                                                  455;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        42
                                                                                      Query Match
                                                                                                               Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABT42181/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT
    SXS
                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes a method for determining whether a compound induces a toxic effect on a tissue or cell. The method comprises preparing a gene expression profile of a tissue or cell sample exposed to the compound, and comparing the gene expression profile to a database comprising data or information on the Tox mean and non-Tox mean value. The method is useful for predicting or identifying at least one toxic genes listed in the specification are useful as diagnostic or toxicity markers for the prediction or identification of the physiological state of tissue or cell sample that has been exposed to a compound, or to identify or predict the toxic effects of a compound or an agent. These may also be used as markers for monitoring toxicity progression or for drug screening. The present sequence represents a primary rat hepatocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Determining if a compound induces a toxic effect on a tissue or cell, for identifying hepatotoxic compounds, comprises comparing a gene expression profile of a tissue or cell sample to a database of Tox mean and non-Tox
                                                                                                                                                                                                                                                                                                                               toxic effect; gene expression profile; hepatotoxicity; diagnostic marker;
                                                                                                                                                                                                                                                                                      Primary rat hepatocyte toxicity modelling related gene SEQ ID NO:3758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Orr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Castle A,
GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGGGGGACGCT 584
                                           ~
                                                                                                                                                                                                                                                                                                                                                        toxicity marker; toxicity progression; drug screening; primary rat hepatocyte toxicity modelling; gene; ds.
                      GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Higgs 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 44; SEQ ID NO 3758; 874pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Χ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Johnson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-FEB-2002; 2002US-0353171P.
13-MAR-2002; 2002US-0363534P.
08-APR-2002; 2002US-0363534P.
10-APR-2002; 2002US-0371134P.
10-APR-2002; 2002US-0371135P.
11-APR-2002; 2002US-0371150P.
11-APR-2002; 2002US-0371413P.
19-APR-2002; 2002US-0373601P.
19-APR-2002; 2002US-0373602P.
22-APR-2002; 2002US-0373602P.
08-MAY-2002; 2002US-0378652P.
09-MAY-2002; 2002US-0378653P.
                                                                                                                                                        ΒÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-MAY-2002; 2002US-0378665P.
09-JUL-2002; 2002US-0394230P.
09-JUL-2002; 2002US-0394253P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2002US-0407688P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2003US-0442900P
                                                                                                                                                        standard; DNA; 573
                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOGIC INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Porter M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-731472/69.
                                                                                                                                                                                                                                                                                                                                                                                                                        Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003065993-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GENE-) GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mendrick D,
Elashoff M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mean values.
                                                                                                                                                                                                                                           04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-AUG-2003
                                         42
                                                                                                                                                  ADB53216
                                                                                                                                                                                                  ADB53216;
```

```
The invention relates to a novel method of predicting at least one toxic effect of a compound. The method comprises a gene expression profile of a tissue or cell sample exposed to the compound, and comparing the gene expression profile to a database comprising at least part of the data or information given in the specification. The methods are useful for predicting at least one toxic effect of a compound, predicting the progression of a toxic effect of a compound, predicting the renal toxicity of a compound, or identifying toxicity markers in tissues or consists of a compound, predicting the renal toxicity of a compound, predicting the renal toxicity of a compound, predicting the renal toxicity assays, in monitoring disease or physiological scates, or disease progression. This polynucleotide represents a rat DNA sequence relating to the toxic effect database described in the specification. NoTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from the World Intellectual Property
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACATTIGCTAAGIGTCCTGATCTGCTGAAATCCTTCTAIGGGGAAGCTGTGGGGG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACATITICTIAAGGGTCCTGATCTGCTCA------CAGGAAGCAGTGGGGC 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCTGGTAT ---- TTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTTT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCTGTCATTGGATTAACTTTTCTTTGTGTGTGTGGAATTGGAGTTGGATTATTTG 444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGATTCCTCAGTTGACCCCATGGGAGGACGCATCAAGGTGTGGGTACCAGGGC----T 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAATAGTCATTGCATGCT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Predicting at least one toxic effect of a compound, useful for toxicity modeling, comprises preparing a gene expression profile of a tissue or cell sample exposed to the compound, and comparing the gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7 AAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                       Elashoff
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 573;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 573 BP; 171 A; 128 C; 137 G; 137 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 4.9e-73;
0; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                         Castle A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 10;
                                                                                                                                                                                                                                                                                                                                                                                         'n
                                                                                                                                                                                                                                                                                                                                                                                      Higgs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 329.2;
                                                                                                                                                                                                                                                                                                                                                                                         Υ,
                                                                                                                                                                                                                                                                                                                                                                                         Johnson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 4; Page; 446pp; English.
                               10-JUL-2001; 2001US-0303810P-
27-SEP-2001; 2001US-0315047P-
22-OCT-2001; 2001US-0319462P-
01-NOV-2001; 2001US-03130867P-
21-NOV-2001; 2001US-03130867P-
06-DEC-2001; 2001US-03181805P-
19-DEC-2001; 2001US-0318144P-
19-DEC-2001; 2001US-031813P-
21-FEB-2002; 2002US-0357842P-
21-FEB-2002; 2002US-0357843P-
                                                                                                                                                                                                                                2002US-0364134P.
                                                                                                                                                                                                                                                                               2002US-0370247P.
2002US-0372794P.
2002US-0371679P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27.5%; 78.2%;
                                                                                                                                                                                                              2002US-0357844P
                                                                                                                                                                                                                                             2002US-0370144P
                                                                                                                                                                                                                                                               2002US-0370206P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 78.2
nes 455; Conservative
                                                                                                                                                                                                                                                                                                                                                                                       Porter M,
                                                                                                                                                                                                                                                                                                                                                     (GENE-) GENE LOGIC INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                to a database.
                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-148464/14.
                                                                                                                                                                                                        21-FEB-2002;
                                                                                                                                                                                                                                                               08-APR-2002;
                                                                                                                                                                                                                                                                                                                  21-APR-2002;
                                                                                                                                                                                                                              15-MAR-2002;
                                                                                                                                                                                                                                                                                 08-APR-2002;
                                                                                                                                                                                                                                                                                                  17-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                       Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Organization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              243
                                                                                                                                                                                                                                                                                                                                                                                       Mendrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                profile
ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
```

```
pain;
pain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Identifying a voltage gated sodium channel (VGSC) modulator for producing analgesia and for relieving chronic pain, e.g. osteoarthritis or HIV pain, comprises bringing into contact a VGSC, a pl1 peptide and a test
                                                                        223
                                                                                                   CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG 422
                                                                                                                                163
                                                                                                                                                             482
                                                                                                                                                                                                                      542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to identifying a modulator of a voltage gated sodium channel (VGSC) e.g. Navl.8 comprising: (a) bringing into contact a
                                                                                                                                                                                        103
                                                                                                                                                                                                                                                 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rat; ss; gene; voltage gated sodium channel; VGSC; Navl.8; pll; small calcium binding protein; analgesia; chronic pain; osteoarthritis; rheumatoid arthritis; neuropathic pain; cancer pain; tri geminal neuralgia; hyperalgesia; inflammatory pain; nociceptive pair tabes dorsalis; phantom limb pain; spinal cord injury pain; central pair post-herpetic pain; HIV pain; non-cardiac chest pain;
                                                            GAGCCCCGCCACTAGTGATAGAAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC
                                           GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGGTC
                                                                                                                     222 CAGGICTITICATITATITIGICCACAGCCAGAGGGICCTITIGATITITICCAAAAACCCAGG
                                                                                                                                                           GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                        162 GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAAGTAGTTTTTTTCCCCTGC
                                                                                                                                                                                                                      GAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT
                                                                                                                                                                                                                                                                             543 GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGCGCACGCT 584
                                                                                                                                                                                                                                                                                                        caac-aarcretreaaaccrececcreaeccerecaerer 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rat cDNA encoding small calcium binding protein pl1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wood JN, Malik-Hall
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      irritable bowel syndrome; bowel disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 84-85; 114pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /product= "p11"
                                                                                                                                                                                                                                                                                                                                                                      102/c
ABX13102 standard; cDNA; 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-AUG-2002; 2002WO-GB003852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-AUG-2001; 2001GB-00020238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Poon L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UNLO ) UNIV COLLEGE LONDON.
                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-278589/27.
P-PSDB; ABG76192.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Okuse K, Baker M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rattus norvegicus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003016917-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                        10-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-FEB-2003
                342
                                           303
                                                                       282
                                                                                                  363
                                                                                                                                                             423
                                                                                                                                                                                                                     483
                                                                                                                                                                                                                                                                                                        42
                                                                                                                                                                                                                                                                                                                                                                                                             ABX13102;
                                                                                                                                                                                                                                                                                                                                                                   ABX13102/
ID ABX1
                                                                                                                                                                                                                                                                                                                                                    RESULT 36
                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                    셤
                                                                                                  ò
                                                                                                                           셤
                                                                                                                                                             8
                                                                                                                                                                                  유
                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   504
```

CC VGSC, a pll peptide (a small calcium binding protein of the S-100 family)

and test compound (tc) so that the VGSC and the pll peptide can form a

CC complex in the absence of the (tc); and (b) measuring an activity of the

VGSC, where a change in the activity of the VGSC relative to the activity

in the absence of the (tc) indicates that the (tc) is a modulator of

VGSC, where a change in the activity of the VGSC relative to the activity

in the absence of the (tc) indicates that the (tc) is a modulator of

VGSC and a cell by increasing the level of pll in the cell, a

compound identified by a method above, a host cell capable of expressing

a VGSC and a pll peptide (where the VGSC and/or peptide 11 is expressing

c voltage gated sodium channel (by administering to an individual a

compound identified by the method above, or an inhibitor of pll activity

c respression). The method is useful for identifying modulators of VGSC.

Compounds identified as modulator of VGSC are useful for manufacturing a

compounds identified as modulator of VGSC are useful for manufacturing a

medicament for modulating the functional expression of a voltage gated

sodium channel, for producing analgesia and for relieving chronic pain

such as osteoarthritis, rheumarcoid arthritis, neuropathic pain, cancer

pain, tri geminal neuralgia, primary and secondary hyperalgesia,

confident cord injury pain, concreptive pain, tost-herpetic pain and HIV pain,

spinal cord injury pain, irritable bowel syndrome and pain associated with

confident chest pain, irritable bowel syndrome and pain associated with

182 399 242 302 422 482 542 504 444 343 283 362 GAGCCCCCCCACTAGATAGAAGCTCTGGAAGCCCACTTTTCCATCTCGGCACTGGTC 223 163 103 99 43 CAGGTCTTTCATTATTTTGTCCACAGCCAGAGGGTCCTTTTGATTTTCCAAAAACCCAGG 503 CTCTGTCATTGGATTAACTTTTCTTTCTGTCTTGTCGAATTGGAGTTGGATGTTATTTG TACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGC AGATTCCTCAGTTGACCCCATGGGAGAGGACGCATCAAGGTGTGGGTACCAGGGC----T GAGGCCCCCCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCCTTTGTCAGTAGTTTTTTTCCCCTGC 483 GAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATTTT AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGTTTGGGATGGCATTTT 7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTT AAAAAAGACTTTCTTTATTGAGGGCAACCGGATGCAAACAATATAAAACTCGAAAGCTC 443 CACATTTCCTAAGGGTCCTGATCTGCTCA------CAGGAAGCAGTGGGGC Gaps 24; Score 329.2; DB 10; Length 573; Sequence 573 BP; 171 A; 128 C; 137 G; 137 T; 0 U; 0 Other; 0; Mismatches 103; Indels 584 ~ GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGGCGGACGCT Pred. No. 4.9e-73; 27.5%; 78.2%; Matches 455; Conservative Best Local Similarity 398 563 67 123 303 282 363 423 162 102 543 42 Query Match 183 222 g 셤 ò g g ò 셤 g ò ò ò 셤 δ 셤 8 ઠે ò 8

504

99

7 AAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTT

Indels

0; Mismatches 103;

Matches 455; Conservative

ð 셤 ð

RESULT 37 ADP72563/c

67 ATCTGGTAT----TTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTTT 122

The invention relates to a method of predicting (the progression of) a toxic effect of a compound by preparing a gene expression profile of a compound and compound and comparing the gene expression profile to a database, or detecting the level of gene(s) gene expression rompared to a control indicates a toxic effect (toxicity progression). The method is useful for predicting (the progression of) at least one toxic effect of a compound. The genes are useful as toxicity markers in drug screening and toxicity assays. The methods are useful for predicting the likelihood that a compound or test agent will induce various specific kidney pathologies, such as nephritis, the predicting or elucidities are useful for determining the similarity of a toxic response to one or more individual compounds and for predicting or elucidating the potential cellular pathways influenced, induced or modulated by the compound or test agent. The kit is useful for predicting or modelling the toxic response of a test compound, for predicting or modelling the toxic response of a test compound, for predicting or modelling the toxic response of a test compound, for contioning the progression of renal disease states, for identifying genes that show promise as new drug targets and for screening known and newly contioning the progression of renal disease states, for identifying genes that show promise as new drug targets and for screening known and newly compand of the invention. (Note: The sequence data for this patent did not form the progression of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pot_sequences). Predicting (the progression of) a toxic effect of a compound, for monitoring the progression of renal disease states, comprises preparing gene expression profile of a kidney tissue or cell sample exposed to the ds; toxic effect; gene expression profile; kidney tissue; differential gene expression; toxicity progression; toxicity marker; drug screening; toxicity assay; kidney pathology; nephritis; kidney necrosis; glomerular injury; tubular injury; focal segmental glomerulosclerosis. 27.5%; Score 329.2; DB 12; Length 573; 78.2%; Pred. No. 4.9e-73; Ë, Sequence 573 BP; 171 A; 128 C; 137 G; 137 T; 0 U; 0 Other; Higgs Johnson KR, Castle A, Renal toxin progression gene marker #1152. Claim 11; SEQ ID NO 1152; 266pp; English BP 24-NOV-2003; 2003WO-US037556. 22-NOV-2002; 2002US-00301856 ADP72563 standard; DNA; 573 (first entry) Mendrick DL, Porter MW, Elashoff M; (GENE-) GENE LOGIC INC. WPI; 2004-460771/43. Best Local Similarity Rattus norvegicus. WO2004048598-A2 26-AUG-2004 Query Match compound

ö

Gaps

ö

Length 318; Indels 258

154

214 138 274 334

18

78

us-10-735-577-16.rng

```
TTGTCAAATGAGAGTTAGATTTTATTTTACATTTGCTAAGTGTCCTGATCTGCTCATGA 198
             compositions and vaccines for the prevention and treament of cancers such as colon cancer. They are also useful for the diagnosis and monitoring of such cancers. Antibodies to the colon tumour proteins and antigan presenting cells that express polynucleotides encoding colon tumour proteins can be used to inhibit the development of cancers. Tells that react specifically with colon tumour proteins are useful for removing tumour cells from samples (e.g. blood) and for cancer treatment. The polynucleotides sequences are also useful in gene therapy. AAS57325-AAS58880 represent the cDNA sequences of the invention that encode for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                $100 protein; human; treatment; cardiomyopathy; cardiac insufficiency; calcium-binding protein; calcium homeostasis; cardiac muscle; pumping oapacity; myocardial cell; systolic calcium ion release; sarcoplasmic reticulum; cardiac disease; hypertension; rhythm disorder; valve defect; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGGAAGCTCTGGA
                                                                                                                                                                                                                                                                           TATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGA
                                                                                                                                                                                                                                                                                                                     TIGICAAAIGAGAGITAGAITITATITITACATITIGCTAAGIGICCTGAICTGCTCAIGA
                                                                                                                                                                                                                                                                                                                                                                                                        AATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCT
                                                                                                                                                                                                                                                                                                                                                                              AATCCTTCTATGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                     TATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGA
    proteins. The sequences of the invention are useful in pharmaceutical
                                                                                                                                                                                                                                                            GGGGATGCAAACAATACAAAATCAAAAGCTTATCTGGTATTTAACTTTTCTT
                                                                                                                                                                        Sequence 318 BP; 102 A; 67 C; 67 G; 82 T; 0 U; 0 Other;
                                                                                                                                                                                                  26.4%; Score 317; DB 4; 1
100.0%; Pred. No. 4.8e-70;
tive 0; Mismatches 0;
                                                                                                                                             portions of human colon tumour proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCCCACTTTGCCATCT 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCCCACTTTGCCATCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAC81810 standard; cDNA; 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Katus HA, Remppis A;
                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human S100A10 cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (KATU/) KATUS H A. (REMP/) REMPPIS A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DE19915485-A1
                                                                                                                                                                                                  Query Match
Best Local Simil
Matches 317; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-OCT-2000
                                                                                                                                                                                                                                                            35
                                                                                                                                                                                                                                                                                       317
                                                                                                                                                                                                                                                                                                                     95
                                                                                                                                                                                                                                                                                                                                                 257
                                                                                                                                                                                                                                                                                                                                                                              155
                                                                                                                                                                                                                                                                                                                                                                                                        197
                                                                                                                                                                                                                                                                                                                                                                                                                                     215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAC81810;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88666666666668888
                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       용
                                                                                                                                                                                                                  362
                                                                                                                                                                                                                                                                                                                                  482
                                         TACATITGCTAAGIGICCTGATCTCGTCATGAAATCCTICTATGGGGGAAGCTGTGGGGGC 182
                                                                                                  AGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATTTC 242
                                                                                                                                                                          422
                                                                                                                                                                                                                                                                                           CAGGTCTTTCATTATTTTGTCCACAGCGAGGGTCCTTTTGATTTTCCAAAAACCCAGG 163
                                                                                                                                                                                                                                                                                                                                                 GAACTCCCTTTCCATGAGCACTCTCAGGTCCTCTTGTCAAGTAGTTTTTTTCCCCTGC 103
                                                                                                                                                                                                                                                                                                                                                                                           542
              créréreatraderritérritéreséreséreséatresadrissargitatire 444
                                                                                                                              AGATTCCTCAGTTGACCCCATGGGAGGACGCATCAAGGTGTGGGTACCAGGGC----T 343
                                                                                                                                                                                                                                                                                                                                                                                                          AAACCTGTGAAATGTAAGCATCATGGTTTCCATGGCATGCTCCCATTTGGGATGGCATTTT 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; colon tumour protein; colon cancer; gene therapy; cytostatic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nucleic acid, useful for treatment, of cancer.
                                                                                                                                                                                                                 GAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTC
                                                                       ----czeszazeczeszes
                                                                                                                                                        CAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGG
                                                                                                                                                                                                                                                                                                                                                                                          GAATTIGIGAAATGIAAACAICAIGGITTICCAIGGCGIGITCCAITIGAGAIGGCAITIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Th present invention relates to the isolation of novel cDNA sequences encoding for at least an immunogenic portion of human colon tumour
                                                                                                                                                                                                                                                                                                                                 GAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cDNA #86 encoding portion of a human colon tumour protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    584
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAG-AATCTGTTGAAACCTGGGCCCTGAGGCGCTGCAGTCT
cacarrrccraaggrccrgarcrgcrca-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New colon tumor proteins and related prevention, diagnosis and monitoring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 4; Page 75; 299pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAS57410 standard; cDNA; 318 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-MAR-2000; 2000US-0191597P.
04-MAY-2000; 2000US-0202024P.
05-MAY-2000; 2000US-0202189P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-MAR-2001; 2001WO-US009246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  King
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-611627/70.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (CORI-) CORIXA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Xu J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200173027-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Meagher MJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-OCT-2001
                                                                                                                             398
                                                                      443
                                                                                                                                                                                                                                                                                                                                                                                          483
              503
                                           123
                                                                                                  183
                                                                                                                                                        243
                                                                                                                                                                                                                 303
                                                                                                                                                                                                                                            282
                                                                                                                                                                                                                                                                        363
                                                                                                                                                                                                                                                                                                    222
                                                                                                                                                                                                                                                                                                                                 423
                                                                                                                                                                                                                                                                                                                                                             162
                                                                                                                                                                                                                                                                                                                                                                                                                      102
                                                                                                                                                                                                                                                                                                                                                                                                                                                  543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAS57410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 38
AAS57410/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     음
                                                                                      8
                                                                                                                   음 상 음
                                                                                                                                                                                                           8 6
                                                                                                                                                                                                                                                            8 6
                                                                                                                                                                                                                                                                                                                              중 음
                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    용
```

```
Gendary cardiomyopathy or cardiac insufficiency contains at least one S100 protein (1) or nucleic acid (II) encoding (I), or their mutants or fragments, or a gene transfer vector containing (II), optionally fragments, or a gene transfer vector containing (II), optionally cornulated with auxiliaries and/or carriers. (I) are calcium-binding proteins involved in calcium homeostasis, so their overexpression in cardiac muscle will improve pumping capacity (and overall capacity) of the heart. In cultured myocardial cells they increase the contraction and relaxation rates associated with increased systolic calcium ion release relaxation rates associated with increased systolic calcium ion release spontaneous mutations and ischemic CMP caused by SR. (I) are used to treat cardiomyopathy (CMP) where inherited or caused by spontaneous mutations and ischemic CMP caused by atteriosclerosis.

Spontaneous mutations and ischemic CMP caused by arteriosclerosis, by nlumnary and/or arterial hypertension, and structural disease caused by thythm disorders or valve defects, generally any condition associated with reduced contractile force. Unlike calmodulin, which is expressed ubiquitously, (I) show tissue-specific expression and treat the causes cardiac disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCCGCAATTAGGGAAAAGAACCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAG 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAA 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Grechtchraftrigiccaedeceaedecrentrigaritriceaaaarceaegaa 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Anti-angiogenesis plasmin fragment; plasminogen; plasminogen activator; plasmin reductase; reduced plasmin protein; anti-angiogenesis activity; urokinase-type plasminogen activator; A61; annexin II heterotetramer; annexin II p36 subunit; annexin II p11 subunit; thioredoxin; protein disulphide isomerase; modulating angiogenesis; mammalian; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATGCAATGGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCAGCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                Composition containing S100 protein, corresponding nucleic acid or vector, useful for treating cardiomyopathy and cardiac insufficiency
                                                                                                                                                                                      This invention describes a novel composition for treating primary or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITGIGAAAIGIAAACAICAIGGIIIICCAIGGCGIGIICCAIIIGAGAIGGCAI 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITGIGAAATGIAAACAICATGGITTCCATGGCGTGTTCCATTTGAGATGGCAT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 294;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mammalian annexin II pl1 subunit antisense polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 294 BP; 96 A; 57 C; 72 G; 69 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 294; DB 3; I
Pred. No. 3.1e-64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 36; Page 17; 36pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADA08452 standard; DNA; 291 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            294; Conservative
                     WPI; 2000-673510/66.
P-PSDB; AAB45540.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADA08452;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mammalia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
```

```
180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            309 CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC 368
                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to a method for producing an antianglogenesis plasmin fragment. The method comprises contacting a plasminogen polypeptide with a plasminogen activator and a plasmin reductase, where a reduced plasmin protein is produced and the antianglogenesis plasmin fragment having anti-anglogenesis activity, is released from the reduced plasmin protein. The plasminogen activator is preferably a urokinase-type plasminogen activator. The anglogenesis plasmin fragment is AG1. The plasmin reductase is selected from annexin II heterotetramer, annexin II plasmin reductase is elected from annexin II heterotetramer is associated with a cell membrane. The method of the invention is useful for modulating (e.g. promoting or inhibiting) anglogenesis. The present sequence represents mammalian annexin II pl1 subunit antisense polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                            Producing an anti-angiogenesis plasmin fragment, useful for modulating, e.g. promoting or inhibiting angiogenesis, comprises contacting a plasminogen polypeptide with a plasminogen activator and a plasmin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         249 CTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATGGTGAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGCAATTAGGGAAAAGAAGCTCTGGAAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTCATTATTTTGTCCACAGGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cricatratrigicacacacacacacacacicitrirgariricaaaaarccacacaaaacic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITITICCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCAGCGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cririccandagracicricaggrecrecrirgraagragecrirareceagedaarrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24.3%; Score 291; DB 9; Length 291; 100.0%; Pred. No. 1.8e-63; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 291 BP; 68 A; 71 C; 57 G; 95 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mammalian annexin II pll subunit sense polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                  Claim 33; Page 12; 29pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                    26-NOV-2002; 2002US-00304287
                                                                                                                      28-NOV-2001; 2001US-0333866P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADA08453 standard; DNA; 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        291; Conservative
                                                                                                                                                                                                                                           WPI; 2003-596985/56
                                                                                                                                                                                                          Kwon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                       (WAIS/) WAISMAN D.
                US2003083234-A1
                                                                                                                                                                         KWON M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-NOV-2003
                                                   01-MAY-2003
                                                                                                                                                                                                          Waisman D,
                                                                                                                                                                                                                                                                                                                                 reductase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADA08453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                         KMON/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADA08453/
ID ADA0
XX
AC ADA0
XX
DT 06-N
XX
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

ö

p11; p11 activity modulator; plasminogen activation; cytostatic; antisense therapy; cancer; tumour; tumour growth inhibition; antisense;

gene; ss; human.

WO2004054517-A2

01-JUL-2004.

Homo sapiens

13-DEC-2002; 2002US-0433140P.

(MEDI-) MEDIOMICS LLC. (WAIS/) WAISMAN D.

Waisman D;

12-DEC-2003; 2003WO-US040029

Human p11 antisense polynucleotide SEQ ID NO:5.

(first entry)

23-SEP-2004

ADP67424; ADP67424

ВP.

standard; cDNA; 291

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a method for producing an antiangiogenesis plasmin fragment. The method comprises contacting a plasminogen polypeptide with a plasminogen activator and a plasmin reductase, where a reduced plasmin protein is produced and the antiangiogenesis plasmin fragment having anti-angiogenesis activity, is released from the reduced plasmin protein. The plasminogen activator is preferably a urokinase-type plasminogen activator. The angiogenesis plasmin fragment is A61. The plasmin reductase is selected from annexin II heterotetramer, annexin II plasmin reductase is associated with a cell membrane. The method of the invention is useful for modulating (e.g. promoting or inhibiting) angiogenesis. The present sequence represents mammalian annexin II pl1 subunit sense polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          291 CTICTITICCTICTGCTICATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCC 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTITICCAIGAGIACTCTCAGGICCTCCTITGIIAAGIAGCCTIIAICCCCAGCGAAITT 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25
                                  plasmin reductase; reduced plasmin protein; anti-angiogenesis activity; urokinase-type plasminogen activator; A61; annexin II heterotetramer; annexin II p36 subunit; annexin II p11 subunit; thioredoxin; protein disulphide isomerase; modulating angiogenesis; mammalian; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Producing an anti-angiogenesis plasmin fragment, useful for modulating, e.g. promoting or inhibiting angiogenesis, comprises contacting a plasminogen polypeptide with a plasminogen activator and a plasmin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTCATTATTTGTCCACAGGCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGCAATTAGGGAAAAGAAGCTCTGGAAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     crrrrccardagracrcrcdggrccrccrrrgrraggraggcrrrrarcccagggarrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 539
                    Anti-angiogenesis plasmin fragment; plasminogen; plasminogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 291;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 291 BP; 95 A; 57 C; 71 G; 68 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24.3%; Score 291; DB 9; 1
100.0%; Pred. No. 1.8e-63;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 41; Page 12; 29pp; English.
                                                                                                                                                                                                                                                      26-NOV-2002; 2002US-00304287.
                                                                                                                                                                                                                                                                                          28-NOV-2001; 2001US-0333866P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 24.3
Best Local Similarity 100.
Matches 291; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-596985/56
                                                                                                                                                                                                                                                                                                                                                                                          Waisman D, Kwon M;
                                                                                                                                                                                                                                                                                                                               (WAIS/) WAISMAN D. (KWON/) KWON M.
                                                                                                                                                                        US2003083234-A1.
                                                                                                                                                                                                               01-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                reductase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           489
                                                                                                                                    Mammalia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   369
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
The present invention describes a composition (I) which modulates the activity of a p11 protein and effects a change in the level of plasminogen activation by a cell. Also described: (1) making (M1) a clonal cell line, which involves isolating a cell, then characterising the activity of a protein produced by the cell or clonal progeny of the cell, where the protein is involved in plasminogen activation; and (2) a clonal cell line (II) useful in the identification of composition that modulate p11 activity, where the clonal cell line is obtained by (M1).

CC (I) has cytostatic activity, and can be used in antisense therapy. (I) is useful for modulating the activity of p11 which involves administering (I) to a cell. The cell can be a human cancer cell, chosen from a HT1080 (I) to a cell. The cell can be a human cancer cell and a CGL-22 colorectal adenocarcinoma cell. (I) is also useful for reducing the development of cancer cell in the patient. (I) is also useful for inhibiting the growth of tumours or inhibiting tumour cell involves administering (I) to a cancer cell in the patient. (II) is useful for identifying a composition that modulates p11 activity which involves candministering (I) to a cancer cell in the patient. (II) is useful for identifying a composition that modulates p11 activity which involves candministering the composition to (II) obtained by (M1), determining the cancer cell in the patient cell in the cell in the cell of a clonal cell line that had not received the composition, and cell of a clonal cell line that had not received the composition, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              identifying the composition that produces a change in pl1 activity. The change in pl1 activity is a change in the level of plasminogen activation activity. The present sequence represents a human pl1 antisense polymucleotide sequence (antisense to ADD67425), which is used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Composition useful for inhibiting growth of tumor in patient, modulates activity of pl1 protein and effects change in level of plasminogen activation by a cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24.3%; Score 291; DB 12; Length 291; llarity 100.0%; Pred. No. 1.8e-63; Conservative 0; Mismatches 0; Indels C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 291 BP; 68 A; 71 C; 57 G; 95 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 5; 140pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-487995/46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Simil
Matches 291; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              249
원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ਨੇ
```

GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 1

ö 308 232 368 172 428 112 488 52

Gaps

ò 8 8

ò

ò 셤

```
cancer in a patient e.g., mouse which involves administering (I) to a cancer cell in the patient. (I) is useful for inhibiting the growth of tumours or inhibiting tumour cell invasion in a patient, which involves administering (I) to a cancer cell in the patient. (II) is useful for identifying a composition that modulates pll activity which involves administering the composition to (II) obtained by (MI), determining the change in pll activity of a cell of the clonal cell line that had not received the composition, and identifying the composition that produces a change in pll activity. The change in pll activity is a change in the level of plasminogen activity. The activity. The present sequence represents a human pll sense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         231 CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          171 CTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     111 CTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATCCCCAGCGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Probe #57 for gene expression analysis in human cervical cell sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human; microarray; gene expression; cervical epithelial cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          489 GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTGAGATGGCGT 1
                                                                                                                                                                                                                                                                                                                                                                                                     Match 24.3%; Score 291; DB 12; Length 291; Local Similarity 100.0%; Pred. No. 1.8e-63; es 291; Conservative 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                          Sequence 291 BP; 95 A; 57 C; 71 G; 68 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chen W, Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-00608408.
2000US-00632366.
2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0180312P.
2000US-0207456P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US000670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAI10124 standard; DNA; 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cervical cancer; ss
                                                                                                                                                                                                                                                                                                            present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200157278-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-FEB-2000; 2
26-MAY-2000; 2
30-JUN-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAI10124;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            369
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Probe:
                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SSSSSSSSSSSSSSSSSSSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a composition (I) which modulates the activity of a pl1 protein and effects a change in the level of plasminogen activation by a cell. Also described: (I) making (MI) a clonal cell line, which involves isolating a cell, then characterising the activity of a protein produced by the cell or clonal progeny of the colnal cell line (II) useful in the identification of composition that modulate pl1 activity, where the clonal cell line is obtained by (MI). (I) has cytostatic activity, and can be used in antisense therapy. (I) is useful for modulating the activity of pl1 which involves administering useful for modulating the activity of pl1 which involves administering (I) to a cell. The cell can be a human cancer cell, chosen from a HT1080 fibrosarcoma cell, a LMCaP prostate cancer cell and a CCL-22 colorectal adenocarcinoma cell. (I) is also useful for reducing the development of
                                                        120
                                                                                                           428
                                                                                                                                CTTCATTATTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC 180
                                                                                                                                                                                                          488
                                                                                                                                                                                                                                    CITITICCATGAGTACTCTCAGGTCCTCCTITGTTAAGTAGCCTTTATCCCCAGCGAATTT 240
          CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Composition useful for inhibiting growth of tumor in patient, modulates activity of pl1 protein and effects change in level of plasminogen activation by a cell.
                                      CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pll; pll activity modulator; plasminogen activation; cytostatic; antisense therapy; cancer; tumour; tumour growth inhibition; gene; ss;
                                                                                                         CTTCATTATTTTGTCCACAGGCGTCTTTTTGATTTTCCAAAAATCCAGGGAACTC
                                                                                                                                                                                                          CTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTT
                                                                                                                                                                                                                                                                                                            539
                                                                                                                                                                                                                                                                                                                                                            291
                                                                                                                                                                                                                                                                                                                                     GTGABARTGTABAACATCATGGTTTTCCATGCGTGTTCCATTTGAGATGGCTT
                                                                                                                                                                                                                                                                                                            GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human p11 sense polynucleotide SEQ ID NO:6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 6; 140pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADP67425 standard; cDNA; 291 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .291
/*tag= a
/product= "p11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-DEC-2002; 2002US-0433140P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-DEC-2003; 2003WO-US040029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIOMICS LLC.
WAISMAN D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-487995/46.
P-PSDB; ADP67422.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004054517-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUL-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Waisman D;
       309
                                                        61
                                                                                                         369
                                                                                                                                                       121
                                                                                                                                                                                                        429
                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                         489
                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADP67425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MEDI-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (WAIS/)
                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 43
ADP67425/C
ID ADP6742
XX
ADC ADP6742
XX
ADT 23-SEP
XX
DI 23-SEP
XX
DI 1, P
XX
DI 2, D
Z
C 2, D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      human.
                                           ద
                                                                                                                                                                                                                                           g
```

```
225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               415
                                             Human genome-dbrived single exon nucleic acid probes useful for analyzing gene expression in human cervical epithelial cells.
                                                                                                                                                                                                                                                                                                                                                                                                       CTAT 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAG 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATTIGGATTIGATGIGICTGTTTTCTTGGC--CCTGGTCTGCTCATGAAAGCCTTCTAC 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGGGGAAGCTGTGGGGTTCCTATAGCGACTCTTTGGGAGAACTCTCACAGGCTG- 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to human single exon nucleic acid probes (SENP). The present sequence is one such probe. The SENPs are derived from human HeLa cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                       59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; foetal liver; gene expression; single exon nucleic acid probe; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGTCTTGGCACTGGTCCATGTCTTATGTTATGTCTGCAGCCAGAGGGTCTTTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                               GGGGGAAGCTGTGGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  - AGTAATTGCTTAGTTCTGCCTGCTTCGTTCCTTCTGCTTCATAGGTACTACAAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCATCTCTACACTGGTCCAGGTCCTTCATTTTTGTCCACAGGCGGGTCTTTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rrcrccaaaaarccaaggaacrccrrrcccargagracrrrcaggcccrccrrcarraag
                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGTTAGATTTTATTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCT
                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAGCCTTTATCCCCGGCAAATCTGTGAAACGTAAACAACACGGTTTCCA 464
                                                                                                                                                                                                                                                                                                                                        DB 4; Length 464;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCA
                                                                                                                                                                                                                                                                                                        Sequence 464 BP; 105 A; 108 C; 101 G; 150 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                      22.8%; Score 273.8; DB 4; Length llarity 78.3%; Pred. No. 4.9e-59; Conservative 0; Mismatches 97; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             probe
                                                                                                                                                                                                                                                                          ftp.wipo.int/pub/published_pct_sequences
                                                                                          Claim 25; SEQ ID NO 57; 487pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          liver single exon nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABAS1754 standard; DNA; 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                       al Similarity
367; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200157277-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human foetal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                         46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABA51754
                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             416
                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                       Best Lock
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 4:
ABA51754
පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ર્જ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        පි
```

```
The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human fetal liver. The
                                                                                                                                                                                                                                                                                                             for analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGTTAGATTTTATTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTAT 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCTCCAAAAATCCAAGGAACTCCTTTCCCATGAGTACTTTCAGGCCCTCCTTCATTAAG 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTCTTGGCACTGGTCCATGTCCTTCATTGTTATGTCTGCAGCCAGAGGGTCTTTTTGA 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                         present sequence is a single exon nucleic acid probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATTTGGATTTGATGTCTCTGTTTTCTTGGC--CCTGGTCTGCTCATGAAAGCCTTCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGTTGTCCACAGTGGTGAGCCCCGCAGTGAGTAAACAAGTTCTGGAAGTTCAGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAATACAAAAATCAAAAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGTCTTGTCAAATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGGGGAAGCTGTGGGCAGGTTCCTATAGCGACTCTTTGGGAGAACTCTCACAGGGCTG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              226 AGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             - AGTAATTGCTTAGTTCTGCCTGCTTCGTTCCCTTCTGCTTCATAGGTACTACAAAATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAGCCTTTATCCCCGGCAAATCTGTGAAACGTAAACAACAACGGTTTCCA 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 464;
                                                                                                                                                                                                                                                                                                              probes useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 464 BP; 105 A; 108 C; 101 G; 150 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 59; 639pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22.8%; Score 273.8; DB 4; 78.3%; Pred. No. 4.9e-59; tive 0; Mismatches 97;
                                                                                                                                                                                                                                                                                                           genome-derived single exon nucleic acid expression in human fetal liver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                             g,
                                                                                                                                                                                                                                             Rank
                                                                                                          2000US-00608408.

2000US-00632366.

2000US-0234687P.

2000US-0236359P.
                                                                                                                                                                                                             (MOLE-) MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                             Chen W,
                                          30-JAN-2001; 2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                             DK,
                                                                                                                                                                                                                                                                            WPI; 2001-483447/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
Matches 367; Conserv
                                                                                                                                                                                                                                             Hanzel
                                                                                                                         03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                                                                                             30-JUN-2000;
                                                                                            26-MAY-2000
               09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             416
                                                                                                                                                                                                                                             Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                           Human
                                                                                                                                                                                                                                                                                                                               gene
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뎡.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

29

405

465

completed: August 18, 2005, 03:59:11

Search

Job time : 684 secs

601579889 603384021 UI-H-FT1-603020917 UI-H-EZ0-

at30b06.x AGENCOURT

BG335520 CA431456 BF686811 BE745512 BI856258 CA412335 CA412335 BIG948995 BIG94895 BIG9489 BIG94895 BIG9489 B

170006000 602858171

K-EST0050 K-EST0119 AGENCOURT AGENCOURT AGENCOURT G0240165 AGENCOURT K-EST0218

us-10-735-577-16.rst

Run on:

```
1. 753
| organism="Homo sapiens"
| organism="Homo sapiens"
| woltype="making" |
| db xref="taxon:9606" |
| clone="IMAGE:5169265" |
| fissue_type="medulla" |
| lab host="DH108" |
| clone=| lib="NIH MGC_119" |
| fote="Organ: brain; Vector: pCMV-SPORT6; Site_1: NotI; |
| fote="Crgan: brain; Vector: pCMV-SPORT6; Site_1: NotI; |
| site_2: EccRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EccRV site is destroyed upon cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

E 1 (Bases I to 753)

I (Bases I to 753)

NH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Prepar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BI827113 753 bp mRNA linear EST 04-OCT-2001
603077308F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5169265 5',
mRNA. sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ALIGNMENTS
                                                                              BF686811
BE745512
BI858258
CA307888
BI488419
                                                                                                                                                                                                                                                                                   BQ948995
BI093074
CN271600
BM767559
BM842132
BU860855
BQ943717
BM461859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BI827113.1 GI:15938663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BI827113
631.4
630.8
628.6
628.6
628.6
628.7
627.8
627.8
625.6
625.6
625.8
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.4
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
621.8
622.8
622.8
623.8
623.8
623.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
625.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1
BI827113/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
ORIGIN
                                                         0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    602662641
601564949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BX362846
AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGENCOURT
602437371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601236785
AGENCOURT
                                                                                                                                                                                           August 17, 2005, 23:46:33 ; Search time 3771 Seconds (without alignments) 12102.641 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BI827113 603077308
BG437145 602488791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CD389775 AGENCOURT
BM785208 K-EST0063
BU521490 AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                full-leng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           602430639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGENCOURT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                          1 ggaactaaaaaagaacttta.......gggcttcccgcccaccgg 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BX362846 E
CD177393 A
BQ646470 A
BQ339527 B
BM541317 A
BU594774 A
BU183451 A
BQ78300 A
BQ332809 B
BU332809 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG774775 6
BE729901 6
CR610742 f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BQ073203 /
BM549820 /
BI825167 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BE378444
BQ050753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BU602356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68479088
                        GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      34239544 segs, 19032134700 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       summaries
                                                                                                                                     nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CD177393
BQ646470
BG339527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BQ678300
BQ332809
BU502376
BU602356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG774775
BE729901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CR610742
BX362846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BE378444
BQ050753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BG437145
CD389775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BM549820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31825167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM785208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BI827113
                                                                                                                                                                                                                                                                                                                                                                                                                                 IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 su
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                                                  US-10-735-577-16
1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9b est1:

9b htc:

9b htc:

9b est4:

9b est4:

9b est6:

9b gs81:

9b gs81:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
Match 1

    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00
    0.00

                                                                                                                                                                                                                                                                                                              Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   694.8
688.2
668.2
668.2
668.6
665.6
652.8
652.8
651.6
651.6
651.6
651.6
652.8
652.8
653.8
654.6
645.4
645.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                636.2
634.4
634.4
632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     640.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB
Maximum DB
                                                                                                                                     OM nucleic
                                                                                                                                                                                                                                                                                                                                                                          Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Searched:
```

Database

Result

셤

8 g 8

g 8 임 8 g ઠે ద ð g 8 g ò g ò g ò g

```
ų,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGGTCCGTTGAAGCCTTGGCCGAGGCGGGGGGGACGCTGGGCGAGCTGGGCGAGCTGGA 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCGCAATTAGGGAAAAGAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGG 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACTICITICCCTICTGCTICATGTGTACTACAAAIAGTCATIGCATGCAAIGGTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCC-TTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCGTTCATTATTTTGTCCACAGGCCAGAGGTCTTTTTGATTTTCCAAAAATCCAGGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGTATTTAACTTTTCGTTTCTCTCGCTTGTCCAATGAGAGTTAGATTTTATGTTGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTGCTAAGTGTCTCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATTTCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITGIGAAATGIAAACATCATGGITTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGCGACGCTGGGCGAGCTGGGCGAGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9 AAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          57.4%; Score 688.2; DB 4; Length 769; larity 97.7%; Pred. No. 2.1e-157; Conservative 0; Mismatches 14; Indels 3
  Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP/Gazdar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGTATTTAACTTTTC-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
tes 729; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                        FEATURES
       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1165
                                                    4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACGCTGGCGCAGAACCAGAGGTAACCGGCTCTGCGGCCACCTACGGGTCTAGGAATTAC 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Trecresargacecrecassas and a second and a second a second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BG437145 769 bp mRNA linear EST 14-MAR-2001
602488791F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4620694 5',
                                                                                                                                                                                                                                                                              625
                                                                                                                                                                                                                                                                                                                                                                     685
                                                                                                                                                                                                                                                                                                                                                                                                                  515
                                                                                                                                                                                                                                                                                                                                                                                                                                                               745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCC 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTCCTCCTTTGTTAAGTAGCTTTTATCCCCAGCGCATTTGTGGAAATGTACACATCATG 694
                                                                                                                                                                                                           574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGACCCGCCTCGCAGAGGCCTCGCCCGCCCCAGACAGAGCGTTCTTGTAAACTTCTCTTC 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 769)
MIH-MOC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                    GTTT-CCATGCCGTGTTCCATTTGAGATGCCATTTTGGTGTGGTCCGTTGAAGCCTTGGC
                                                                                                                                                                                                                                                                                                          TCTTCCTGCCCCCGACTCCCCCGACCCCGGGCGCGCGCCCACCCCTGCCTCGCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTCGGGTTTGGTTTTAGAAAGTGTACAAATCAAAGAACCCGGCCGTCCTGCGGGTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACGCTGGCGCAGAACCAGAGGTAACCGCCTCTGCGGCCACCTACGGGTATTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGGCGGCCTGCGCCAGTGGAGGGGGGGC
                                                                                            GGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGT-GAAATGTAAACATCATG
                                                                                                                                                                                                                                                                           cceccecercretecerricerraciacerecececereceraceea-ecerece
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGCGGGAGGAGCCTGGCGGCGCTCGGCAGGGCGCTCCCCCCAGCCCTGTCTCCTCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGCGGGAGGAGCCTGGCGGCGCTCGCCAGGCGCTCCCCCAGCCCTGTCTCCTCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGACCCGCCTCGCAGAGGCCTCGCCCCCCAGACAGAGCGTTCTTGTAAACTTCTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGCATCCCCACCCTGAGCCTGCCCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           154 TTGCTGGATGACCCTGCAGGGAGTGGCACGTGGAGTCCTATCGACCTCAGAGGCACTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94 AGATTAGCCCTAGGAGGTCCGTCTGGGGGTCTCGGCCGCCTGCGCCCAGTGGAGGGGCGGC
                                                    Gaps
                                                    4.
    Length 753;
                                               Indels
                                                 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCTCCCAGAAGCCGGGCTTCCCGCCCCACCGG 1199
Score 694.8; DB 4;
Pred. No. 5.1e-159;
0; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCTCCCCAGAAGCCGGGCTTCCCGCCCCACCGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mRNA sequence. _ _ BG437145
BG437145 GI:13343651
  57.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
  Query Match 57.9
Best Local Similarity 98.5
Matches 743; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1106
                                                                                                                                                                                                                                                                         267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1166
                                                                                            449
                                                                                                                                                                                                                                                                                                                      633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            34
                                                                                                                                                                                    508
                                                                                                                                                                                                                              693
                                                                                                                                                                                                                                                                                                                                                                   626
                                                                                                                                                                                                                                                                                                                                                                                                                573
                                                                                                                                                                                                                                                                                                                                                                                                                                                             989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 2
BG437145/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
```

요 ò

ò

466 300

```
Homo sapiens
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 679)
Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R., Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BM785208 679 bp mRNA linear EST 05-MAR-2002
K-EST0063546 S13KMS581 Homo sapiens CDNA clone S13KMS581-2-G09 5',
                                                                                                                                                                                                               GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 346
                                                                                                                                                                                                                                                            361 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                  345 TCCAGGTCCTTCATTATTTTGTCCACAGGCAGAGGGTCTTTTTGATTTTTCCAAAAAATCCA 286
                                                                                                                                                                                                                                                                                                                                              421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                  285 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATTATCCCCA 226
                                                                                                                                                                                                                                                                                                                                                                                                                                 481 GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                          225 GCGAATTTGTGAAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGGTGTGGTCCGTTGAAGCCTTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGACGCGGGGCGGAGAGCCGAGCGCGGCGGCTGTGCGCCTTTCCTTAGTACGTGCGGC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 105 CTGGACGCGGGGCGGAGCGAGCGCGGCGGCTGTGCGCCTTTCTTAGTACGTGCGGC 46
                                                                                                           525 GCAGATICCITAAGCGACCCTTIGGGACAACTCTTAICAGGGAGGGAACTGCTCATT
                                                                                    GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contract: Aim 15
Genome Research Center

Korea Research Institute of Bioscience & Biotechnology
52 Exeun-dong Yuseong-gu, Daejeon 305-333, South Korea
51 182-42-860-4470
Fax: +82-42-860-4409
Email: yongsung@mail.kribb.re.kr
Plate: 2 row: G column: 09
High quality sequence stop: 679.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21C Frontier Korean EST Project 2001
Unpublished (2002)
Contact: Kim YS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"

/mol_type="mRNA"

/db_xrefe=taxcon:9606"

/clone="$13KMS581-2-G09"

/tissue_type="myeloma"

/cell_line="KMS-5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGTGGGTAGAGGGAGGCGGCGCGGGA 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGTGGGTAGAGGGAGGCGCGCGGGA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mRNA sequence.
BM785208
BM785208.1 GI:19133440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kim, Y.S.
  181
                                                                                    241
                                                                                                                                                                     301
                                                                                                                                                                                                                 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
BM785208/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                           Dp
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                               g
                                                                                ò
                                                                                                                 g
                                                                                                                                                            ò
                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            용
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo saplens

Evaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I. (bases I to 883)

S. I. (bases I to 883)

Mational Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Daniela S. Gerhard, Ph.D.

Office of Cancer Genomics

Office of Cancer Genomics

National Cancer Institute / NIH

Bldg. 31 Rm10A07 Bethesda, MD 20892

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Dr. Jamie Thompson, University of WI

CDNA Library Preparation: Gina Zastrow-Hayes

CDNA Library Preparation: Gina Zastrow-Hayes

CDNA Library Preparation: Gina Zastrow-Hayes

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LiNL at:

http://image.llnl.gov

Plate: NDKM72 row: e column: 19

High quality sequence start: 8

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                      CD389775 883 bp mRNA linear EST 30-MAY-2003
SERCOURT_14305360 NIH_MGC_173 Homo sapiens CDNA 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
    665
                                                                              666 GGTAGAGGGGGGGGGGGGAGCGGAAGCCTGGCGGGGGGCTCGGCAAGGCGCTCCC 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              585 TITACATITIGCTAAGIGICCIGATCTICCIGAAAICCTICIATGGGAAGCIGIGGG 526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /tissue_type="embryonic trophoblasts, made from WA01 stem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCTTATCTGGTATTTAACTTTTCTTTCTTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                        87
                                                                                                        86 GGTAGAGGGAGGCGCGCGGGAGCGGGAGGCCTGGCGGCGCTCGCCC7CCC 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /lab_host="DH10B TonA"
/clone_lib="NIH MGC 173"
/note="Vector: pDoNRZ01; Site_1: attP2; Site_2: attP1;
LIBR_PRIMING - oligo dT; METHÖD - full-jength enriched;
LIBR_PROVIDER - Bradfield"
                    1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 57.3%; Score 687; DB 6; Length 883; 100.0%; Pred. No. 4.3e-157; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                     CCAGCCCTGTCTCCTCCCCTCTTCC 751
                                                                                                                                                                                           CCAGACCTGTCTCCTCCCCTCTTCC 1
                                                                                                                                                                                                                                                                                                                                                              CD389775 CD389775.1 GI:31228693
                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       al Similarity 100.
687; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .883
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S:
Matches 687
909
                                                                                                                                                                     726
                                                                                                                                                                                                             56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                 LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                              RESULT 3
CD389775/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                   셤
                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

σ

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
E 1 (bases 1 to 681)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
L Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM124 row: c column: 01
High quality sequence stop: 624.
                                                                                                                                                                                                                                                                                                                                                                                                                681 bp mRNA linear EST 13-SEP-2002
AGENCURT_10152991 NIH_MGC_71 Homo saplens cDNA clone IMAGE:6527353
5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol type="mRNA"
/mol type="mRNA"
/db xref="taxon:9606"
/clone="IMAGE:6527353"
/tissue type="leiomyosarcoma"
/lab_host="DHIOB (phage-resistant)"
/clone_lib="WIH MGC 71"
/note="Organ: uterus, Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 2.1 kb. "
1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCTTATCTGGTATTTAACTTTTCTTTCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  486 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ch 55.5%; Score 665; DB 5; ll Similarity 99.8%; Pred. No. 1e-151; 665; Conservative 0; Mismatches 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BU521490.1 GI:22829016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .681
                                                                                                                                                                                                                           661 GGGTGGGT 668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                        GGGTGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BU521490
                                                                                                                                                                                                                                                                                        œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
BU521490/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                          셤
                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                    ઠે
                                                                                                                                                                                                                        à
                      /done lib="813486561"
// note="Wettor: pCNS; Site 1: EcoRI; Site 2: NotI; The poly (A)+ RNA was dephosphorylated with bacterial alkaline phosphatase (BAP) and then decapped with tabacco acid pyrophosphatase (TAP). The decapped intact mRNA was ligated with DNA-RNA linker including EcoR I site by treatment of T4 RNA ligase and the first strand cDNA was synthesized from oligo dT-selected mRNA by priming with dT-tailed vector. The dT-tailed vector was adjusted to have about 60nt. The cDNA vector was circularized with E. coli DNA ligase after digestion of EcoRI which site is also included in vector. An RNA strand converted to a DNA strand by Okayama-Berg method. The obtained cDNA vectors were used for transformation of competent cells E. coli ToplOF' by electroporation method. The cDNA libraries constructed by this method are full-length enriched cDNA library. After analyzing and sequencing about 2,000 - 3,000 colonies in original cDNA library, the abundant cDNA were selected and amplified by PCR reaction using vector region primer including T? promotor as 5' primer and N(dT)14 as 3' primer. The PCR products were used as template for synthesis of biotinylated single stranded by in vitro transcription reaction. The synthesized RNA probes were hybridized with antisense single stranded cDNA propret of from original liberary and inclasted from original liberary and inclasted with antisense single stranded cDNA propared from original hybrid and by hour triversed from original hybrid hybri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      avidin-gel. After removing DNA-RNA hybrids by centrifuge, the subtracted cDNA libraries were constructed by transformaton of the remaining DNA into competent cells E. coli ToplOF, with electroporation method."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGATGCAAACAATACAAAAATAA 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITACATITICCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rcreccracricrircccricrecricarereracracaaaaraererigearecaare 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCAGGICCTICATTATTTTGICCACAGCCCAGAGGGICTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGATTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITACATITICCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGAACTAAAAAGAACTTTATTTATTGAGGCCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           55.7%; Score 668; DB 4; Length 679; 100.0%; Pred. No. 1.8e-152; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 668; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
```

유 δ g ⋧ ö

.; 0

q

8 8

8 8

P G

g

∂

à

셤 ð g

120

547

180

240

427

g

8

요

6 B 6

쉽 ઠે 셤 ò

```
Local Similarity
les 666; Conserv
                                                                                                                                                         250
                                                                                                                                                                                      671
                                                                                                                                                                                                                     310
                                                                                                                                                                                                                                                   611
                                                                                                                                                                                                                                                                                  370
                                                                                                                                                                                                                                                                                                               551
                                                                                                                                                                                                                                                                                                                                              430
                                                                                                                                                                                                                                                                                                                                                                             491
                                                                                                                                                                                                                                                                                                                                                                                                           490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11
                                                                                             Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 7
BE729901/c
LOCUS
                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                             Query
                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                           8
                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 671)

E 1 (bases 1 to 671)

E 1 (bases 1 to 671)

I Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: ATCC

CDNA Library Preparation: Ling Hong/Rubin Laboratory

CDNA Library Preparation: Ling Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

Http://mage.llnl.gov

Rollmanility sequence copp: 666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BG774775 671 bp mRNA linear EST 15-MAY-2001
602662641F1 NIH_MGC_21 Homo sapiens CDNA clone IMAGE:4811026 5',
GTGAGGCCCGCAATTAGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                          420
                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 247
                                                                                                                                                                                                      GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                    GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 127
                                                                                                                                                                                    GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                               CTGGACGCGGGGCGAGCGCGCGGCGGCTGTGCGCCTTTCCTTAGTACGTGCGCC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone="IMAGE:4811026"
/tissue type="choriocarcinoma"
/lab_mbgt="DH10B (phage-resistant)"
/clone lib="NH1 MGC 21"
/note="Organ: placenta; Vector: pOTB7; Site_1: XhoI;
Site_2: EcoR1; cDNA made by oligo-dr priming.
Directionally cloned into EcoR1/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp
                                                                                                                                                                                                                                                                                                                                 TCCAGGICCTICATIAITITGICCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAAICCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .671
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA sequence. _ _ BG774775
BG774775.1 GI:14045092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGTGG 666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGTGG 1
                                                                                                                                                                                                                                                                                                                                              126
                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                426
                                                                                          366
                                                                                                                                                       306
                                                                                                                                                                                                                     246
                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                           99
                                                               301
                                                                                                                         361
                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                  186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
BG774775/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
```

g

8 용 δ 8

```
912 bp mRNA linear EST 15-SEP-2000 601561949F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3925932 5', BE729901
for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                  ö
                                                                                                                                                                  309
                                                                                                                                                                                                                                                                                                                                                                      489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             909
                                                                                                                                                                                                  612
                                                                                                                                                                                                                                   369
                                                                                                                                                                                                                                                                    552
                                                                                                                                                                                                                                                                                                     429
                                                                                                                                                                                                                                                                                                                                    492
                                                                                                                                                                                                                                                                                                                                                                                                      432
                                                                                                                                                                                                                                                                                                                                                                                                                                        549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Bukaryotas, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Bukaryotas, Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 912)
NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           431 TGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGCGGAGAGGCGCGCGCGCGCGTTCCTTACTACGTGCGCGGGGGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGGAGCGGTGCGGGAGCGGAGGAGCCTGGCGGGCGCTCGGCAGGCGCTCCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCC
                                                                                                                                                                                                                                                                                                                                                                                    TITICCAIGAGTACTCTCAGGTCCTTCTTGTTAAGTAGCCTTTAICCCCAGCGAATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGGGAGCCGCGCGCGCGCGCGAGCCTGCCGGCGCGCTCCGCCAGGCCGCTCCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCATTATTTTGTCCACAGCGAGGGTCTTTTTGATTTTCCGAAAATCCAGGGAACTCC
                                                                                                                                                                                                                                                                                                                                                                      TTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                        TGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCGTTGAAGCCTTGGCCGAGGCGCGCGGACGCTGGGCGAGCTGGGCGAGCTGGACGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCC
                                                                                                                                   ö
                                                                                                  Length 671;
                                                                                                 Score 663; DB 4; I
Pred. No. 3.1e-151;
0; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BE729901.1 GI:10143893
                                                                                                 55.3%;
llarity 99.3%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGAGCCTGCC 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gradectrace 1
```

45

```
Direct Submission Submitted (20-JUJ-2004) Genoscope - Centre National de Sequencage : Submitted (20-JUJ-2004) Genoscope - Centre National de Sequencage : PP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr | 18t strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoA V sites of the pCWMSpORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invirogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CR610742 660 bp mRNA linear HTC 21-JUL-2004 full-length cDNA clone CSODK004YH20 of HeLa cells Cot 25-normalized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           537 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 478
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                              163 GGCAGGGCGTCCCCCAGCCTGTCTCCTCCTCTTCCTGCCCCCGACTCCCCCGAC
                                                                                                                                                                                               103 CCCGGGCGCGCGCCCACGCCCTGCCTCCC-GACCCGCTTCGCAGAGGCCTCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITACATITIGCIAAGIGICCIGAICTGCICAIGAAAICCITCIAIGGGGAAGCIGIGGG
                                                                                                                                                                CCCGGGCGCGCGCCCACGCCCTGCCCTCGCTCCCGGACCCGCCTCGCAGAGGCCTCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             597 AAGCTTATCTGGTATTTAACTTTTCTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact : Feng Liang Email : fliang@lifetech.com URL : http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="CSODK004YH20"
/tissue_type="HeLa cells Cot 25-normalized"
/plasmid="pCMVSPORT_6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 3; Lc...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 660
                                                                                                                                                                                                                                                                         CGCCCCAGACAGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAAC 874
                                                                                                                                                                                                                                                                                                  CGCCCCAGACAGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mammalia; Eutheria; Primates; Catarrhini; Hor
1 (bases I to 660)
Li W.B., Gruber, C., Jessee, J. and Polayes, D.
Pull-length cDNA libraries and normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       54.8%; Score 657; DB
100.0%; Pred. No. 9e-
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .660
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of Homo sapiens (human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CR610742.1 GI:50491549
HTC; CNSLT cDNA.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1 to 660)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.
Matches 657; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Faraday Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genoscobe
                                                                                                                                                                771
                                                                                                                                                                                                                                                                         831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                        711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 8
CR610742/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                     à
                                                                                                     요
                                                                                                                                                             8
                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                               /USAILSHE TOWN DADFERS.
/WD_LYPGE="MRNA"
/WD_LYPGE="MRNA"
/WD_LYPGE="MRNA"
/dlone="INAGE:3925912"
/tissue_type="Melanotic melanoma"
/tissue_type="Melanotic melanoma"
/tissue_type="Melanotic melanoma"
/tissue_type="Melanotic"
/tisue_type="Melanotic"
/tissue_type="Melanotic"
/tissue_type="Melanoti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGATAATTAATTTTACATTGCTAAGTGTCCTGATCTGCTCATG-AATCCTTCTATGGGGA 698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATC 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTACACTGGTCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTC 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGCCGTGTTCCATTTG 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGATGGCATTTTGGTGTGCGTTGAAGCCTT-GCCGAGGCGCGCGGACGCTGGCCGA 284
                                                                                                                         CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov Plate: LLCM753 row: b column: 13 thigh quality sequence stop: 745.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCATGCAATGGTGA-GCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C-AAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGATTTTATTTTACATTTGCTAAGTGTCCCTGATCTGCTCATGAAATCCTTCTATGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A - - CTGTGGGCCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITATCCCCAGCGAAITIGIGAAAIGIAAACAICAIGGIITICCAIGGCGIGIICCAITIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGATGGCATTTTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 912;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 658.8; DB 2;
Pred. No. 3.4e-150;
0; Mismatches 12;
                                                                         Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC/DCTD/DTP
                         Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 97.4%;
Matches 744; Conservative
                                                                                                                                                                                                                                                                                                                                                          . .912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   651
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
```

120 538 180

9

Gaps

ö

598 120 538 180 478 240 418 300

9

358

360 298 420 238 480 540 118

28

Thu

g

ò 8 ò g

ò a ઠે

ò

윱

ò 요 δ g

```
CD177393 705 bp mRNA linear EST 19-MAY-2003
AGENCOURT_13977124 NIH_MGC_173 Homo sapiens cDNA 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCC 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541 TIGGIGIGICCGITGAAGCCIIGGCCGAGGCGCGGGGGGACGCIGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (Dases 1 to 705)

NIH-MGC http://mgc.nci.nih.gov/.

NiH-MGC http://mgc.nci.nih.gov/.

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGACGCGGGGGGGGGGGGGGGGGGGGCTGTGCCTTACTACTACTGCGCC 657
                                                                                                                                                  GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCGTTT
                                                                                                                                                                                                                                                                                                                                                                                               GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rccaddrictricarratrirgriccacadaddagacrirrrrgarrirccaaaarcca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGACGCTGGGCGAGCTGGGCGAG
                                                                                                                          1 GGAACTAAAAAAGAACTTTATTTATTGAGGCCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                         61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                597 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    þe
                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGACGCGGGGGGGGGGGGGGGCGCGCGCCTGTCCTTAGTACGTGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Jamie Thompson, University of WI
CDNA Library Preparation: Gina Zastrow-Hayes
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
                                                                                    ..
0
                                                                                    Indels
                                              Length
                                          Score 657; DB 5; L
Pred. No. 9e-150;
); Mismatches 0;
                             54.8%; scc...
100.0%; Pred. No. ...
... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CD177393.1 GI:30863968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
Homo sapiens
                                                                                  Matches 657; Conservative
                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CD177393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       117
                                          Query Match
Best Local 9
                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                             537
                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                            477
                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CD177393/C
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
    ORIGIN
                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                       d
                                                                                                                          ò
                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (base 1 to 660)

2 Li, W.B., Gruber.C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization

1 Unpublished (2001)

On May 5, 2003 this sequence version replaced gi:30380679.

Contact: Genoscope

Genoscope - Centre National de Sequencage

2 rue Gaston Cremieux, CP 5706 - 91057 ENRY cedex - FRANCE
Email: seqref@genoscope.cns.fr. Web: www.genoscope.cns.fr

1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and Ecok V sites of the pCMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BX362846 G60 bp mRNA linear EST 23-APR-2004 BX362846 Homo sapiens HELA CELLS COT 25-NORMALIZED Homo sapiens CDNA clone CSODK004YH20 5-PRIME, mRNA sequence.
                                          300
                                                                                  358
                                                                                                                        360
                                                                                                                                                                 298
                                                                                                                                                                                                       420
                                                                                                                                                                                                                                               238
                                                                                                                                                                                                                                                                                   GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGAGCTGGGCGAGCTGGGCGAG
GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGGAACTGCTCATT 418
                                                                                                                                                                                                                                                                                                                         237 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTTAAGTAGCCTTTTATCCCCA 178
                                                                                                                                                                                                                                                                                                                                                                                         GGGAATTIGIGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTIGAGATGGCATT 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /cell type="HELA CELLS COT 25-NORMALIZED"
/cell line="HELA"
/clone lib="Homo sapiens HELA CELLS COT 25-NORWALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR V
sites of the pCMVSPORT 6 vector. Library was normalized.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       657
                                                           GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGCCAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                    GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        For more information about this cluster, see http://www.genoscope.cns.fr/cdna?s=CSODK004DD10QP1&c=980.r.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CSODK004YH20"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BX362846.2 GI:46552294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                        177
                                                                              417
                                                                                                                                                            357
                                                                                                                                                                                                                                         297
                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         57
477
                                          241
                                                                                                                    301
                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BX362846/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
```

```
30646470/c
                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99
                                                                                                                                                                                                                                                                                                                          GGAACCAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATACAA 625
                                                                                                                                                                                                                                                                                                                                                                            TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAGGCCCGCAATTAGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGGGGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                  from WA01 stem
                                                                                                                                                                                                                                                                                                                                                              AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTACATTTGCTGAGTGTCCTGATCTGCCCATGAAATCCTTCTATGGGGGAAGCTGTGGG 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGATTCCTTAAGCGACCCTTTGGGACCATCTTATCAGGGTGGAGCGAACTGCTCATT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rccaggrccrrcarrarrrgrccacagagggrcrrrrrgarrrccaaaaarcca 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25
                                                                                                                                                         /lab_host="DH10B TonA"
/clone_lib="NIH MGC_173"
/note="Vector: pDONEO1; Site_1: attP2; Site_2: attP1;
LIBR_PRIMING - oligo dT; METHOD - full-length enriched;
LIBR_PROVIDER - Bradfield"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTCCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGACGCGGGGGGGGGGGGCGGCGGCGGCTGTGCGCTTCCTTAGTACGTGCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                      Length 705;
                                                                                      /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/tissue_type="embryonic trophoblasts, made
                                                                                                                                                                                                                                                                               Indels
found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                    Score 652.8; DB 6;
Pred. No. 9.7e-149;
0; Mismatches 7;
      http://image.llnl.gov
Plate: NDKM18 row: c column: 22
High quality sequence start: 17
High quality sequence stop: 670.
                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 98.9%;
Matches 657; Conservative
                                                                             . .705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                            564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84
                                                                                                                                                                                                                                                                                                                                    684
                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                       624
                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24
                                                                                source
                                                                 FEATURES
                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                    8 6 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                       õ
```

```
/organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="mRNA"
/db_txef="txef="txexon:9606"
/clone="txef="txexon:9606"
/clone="txef="txexon:9606"
/lab_host="bulloB (phage-resistant)"
/lab_host="bulloB (phage-resistant)"
/clone=lib="NTH MGC_100"
/clone=lib="nth"
/clone=lib="nth"
/clone=lib="nth"
/clone=lib="txet"
                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (Bases 1 to 670)

IN INH-MOC http://mgc.nci.nih.gov/.

IN INTIVITIES (1999)

IN INTIVITIES (1999)

IN INDIVITIES (1999)

IN INDIVITIES (1999)

IN INDIVITIES (1999)

IN INDIVITIES (1999)

COLACT: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov

Tissue Procurement: CGAP (Stanford)

COLACT: Preparation: Rubin Laboratory

CDNA Library Preparation: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov

Plate: LLCWA512 row: h column: 18

High quality sequence stop: 640.

Location/Qualifiers

Irre
670 bp mRNA linear EST 15-JUL-2002
AGENCOURT 8286408 NIH_MGC_100 Homo sapiens cDNA clone IMAGE:6299585
5', mRNA Sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGATICCTTAAGCGACCCTTIGGACAACTCTTATCAGGGAGGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAACTAAAAAGAACTITATITATIGAGGGCAAGGGGAIGCAAACAATACAAAAATCAA 593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rereceraetrecerrecerreserrereraciaecaaaaragrearideargeaarg 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 670;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 54.4%; Score 652; DB 5; Le
100.0%; Pred. No. 1.5e-148;
tive 0; Mismatches 0;
                                                                                                                                                                                                      BQ646470.1 GI:21770642
                                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 100.0
Matches 652; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  II RT (L1)
Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                   LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ਨੇ
```

537 248 477

655 128 595 308

417

368

357 428 298 488

238 548 178 608 899

28

셤

g ઠે g ઠે 셤

ò

δ

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

I (basea 1 to 663)

SINIH-MGC http://mgc.nci.nih.gov/.

I Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: ATCC

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            663 bp mRNA linear EST 20-FEB-2002
S. mRNA sequence.
EM541317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAGGGAGGCGCGCGCGCGCGCGCGCCCTGGCCGCGCCCTCGGCAGGCCGCTCCC 725
                                                                                          CTTAAGCGACCCTTTGGGACACTCTTATCAGGAGGAGCGAACTGCTCATTTCTGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               237 GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGAGTGTG
                          594 TGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGGAA--CTGTGGGGCAGATTC
                                                                                                                                                                                                                                                                                                                                                                               309 CGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGGGGAGAGGGGGGGGGGGGTGTGCTTCCTTAGTAGTACGTGCGGCGGGGGG
9 AAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAAAAGCTTAT
                                                                                                                                                                                         TGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTC
                                                                                                                                                                                                                                                                                  CTTAAGCGACCCTTTGGGACACACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTCCGTTGAAGCCTTGGCCGAGGCGCGGACGCTGGGCGAGCTGGGCGAGCTGGACCTGGACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BM541317.1 GI:18769859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                       129
                                                                                                                                                                                                                                                                                  189
                                                                                                                                                                                                                                                                                                                                536
                                                                                                                                                                                                                                                                                                                                                                               249
                                                                                                                                                                                                                                                                                                                                                                                                                        476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 13
BM541317/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                  g
                                                                                                                            g
                                                                                                                                                                           ò
                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                   ठे
                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="leionyosarcoma cell line"
/lab_host="leionyosarcoma cell line"
/lab_host="DH10B (phage-resistant)"
/clone lib="NIH MGC 46"
/clone lib="NIH MGC 46"
/note="Organ: uterus; Vector: pOTB7; Site_1: Xho1; Site_2:
ECGRI; cDNA made by oligo-dT priming. Directionally cloned
into EcoRI/XhoI sites using the following 5' adaptor:
GGCAGAG(G). Size-selected >500bp for average insert size
I.8kb. Library constructed by Ling Hong in the laboratory
of Gerald M. Rubin (University of California, Berkeley)
using ZAP-cDNA synthesis kit (Stratagene) and Superscript
II.RT (Life Technologies). Note: this is a NIH_MGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
E 1 (Bases I to 737)
E 1 (Bases I to 737)
I Dipublished (1999)
L Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Ling Hong/Rubin Laboratory
cDNA Library Preparation: Ling Hong/Rubin Library
cDNA Library Preparation: Library
cDNA Library Preparation: Library
cDNA Library Preparation: Library
cDNA Library Preparation: Library
cDNA Librar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    737 bp mRNA linear EST 27-FEB-2001 602437371F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4555216 5', BG339527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3;
                   TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                   480
                                                                                                                                                                                                             540
                                                                                                                                      113
                                                                                                                                                                                                                                                                                                     TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGCGACCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                      53
                                                                                                                                                                                                                                      GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                TTGETGTGGTCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                             GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGCCGTGTTCCATTTGAGATGCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                CTGGACGCGGGCGGAGAGCCAGCGCGGCCGGCTGTGCCTTAGTA 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 737;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 651.6; DB 4;
Pred. No. 1.9e-148;
0; Mismatches 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4555216"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG339527.1 GI:13145965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          54.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 54.3
Best Local Similarity 96.9
Matches 695; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  II RT (L:
Library.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . . . 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                  292
                                                                                                                421
                                                                                                                                                            232
                                                                                                                                                                                                                                                       172
                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                 112
                                                                                                                                                                                                                                                                                                                                                                                                                                              52
                      361
                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BG339527/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
```

Euteleostomi;

```
/tissue_type="mixed (pool of 40 RNAs)"
/lab host="nH10B (T1-phage-resistant)"
/cloin= lib="NH1MGC-112"
/cloin= lib="NH1MGC-112"
/cloin= lib="NH1MGC-112"
/cloin= lib="NH1MGC-112"
/cloin= lib="NH1MG-112"
/cloin= lib="NH1MG-112"
/cloin= lib="NH1MG-112"
/cloin= lib="NH1MG-112"
/cloin= lib="NH1MG-112"
/cloin= lib="NH1MG-11"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Triacarrigciaagigrecrearciecreargaaarecriciargegegaagerereg 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Robert Strausberg, Ph.D.
Email: cgapbaremail.nih.gov
Tissue Procurement: NCI
CDNA Library Preparation: Michael Brownstein Laboratory
CDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLML)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov.p column: 19
High quality sequence stop: 457.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAACTAAAAAAGAACTTTATTTATGAGGGGCAAGGGGATGCAAAACAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                        Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleosto
Bukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.
1 (bases 1 to 843)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 53.9%; Score 646.6; DB 5; Best Local Similarity 99.4%; Pred. No. 3.3e-147; Matches 649; Conservative 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .843
/organism="Homo sapiens"
/mol_type="mRNA"
/db xref="taxon:9606"
/clone="IMAGE:6450402"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                415
                                                           ORGANISM
                                                                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BUS94774 843010 NIH_MGC_142 Homo sapiens cDNA clone IMAGE:6450402 5', mRNA sequence.
BUS94774.1 GI:23246533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   648 GGAACTAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   288 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                168 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGCGTGTTCCATTTGAGATGGCATT 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TIGGIGIGGICCGITGAAGCCTIGGCCGAGGCGCGCGGACGCIGGGCGAGCIGGGCAAG
                                                                                                                                                                                                                          /clone="INAGE:5521398"
/tissue type="leiomyosarcoma"
/lab host="MH108 (bhage-resistant)"
/clone_lib="NIH MGC_71"
/note="Organ: uterus; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sall; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 2:1 kb.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Greadecececaarragegaaaagaaecrerggaagececaerrrecearereraeaege 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     54.0%; Score 648; DB 4; Le
100.0%; Pred. No. 1.4e-147;
cive 0; Mismatches 0;
                             column: 07
                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
http://image.llnl.gov
Plate: LLAMI2186 row: p col
High quality sequence stop: o
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                             i. .663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Simil
Matches 648; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 14
BUS94774/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                   DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

g

8 8

8

ò 8 8

g ò 유 ò ద જે ద 8 요 ò 셤

120 536 180

9

0; Gaps

Length 843; Indels 240 416 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360

301

δ

ACCESSION VERSION

409 300 349 289 420

360

480 169 109 900

49

```
BQ678300 940 bp mRNA linear EST 15-JUL-2002
AGENCOURT B500535 NIH_MGC_112 Homo sapiens cDNA clone IMAGE:6294152
S', mRNA Sequence.
BQ678300. GI:21790979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            288 TCCAAGTCCTTCATTATTTTGTCCACAGCGCGCTCTTTTTGATTTTCCAAAAATCCA 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo. 1 (bases 1 to 940)
NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM2498 row: f column: 09
High quality sequence stop: 579.
Location/Qualifiers
                                                                                                                                  348 GTGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                            GGAACTAAAAAAGACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGCTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541 TIGGIGIGGICCGTIGAAGCCTIGGCCGAGCGCGGCGACCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  108 TIGGIGIGGICCGITGAAGCCITGGCCGAGGCGCGGCGGACGCTGGCGAGCTGGGCGAG
      1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                         TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                   528 TITACATITIGCIAAGIGICCIGAICIGCICATGAAAICCITCIAIGGGGAAGCIGIGGG
                                                                                                                                                                                                                                                                                                                                                                                                    GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                    648
                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BQ678300/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                   g
                                                                                                                                      ò
                                                                                                                                                                                  g
                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  જે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="mRNA"
/db ref="taxon:9606"
/clone="IMAGE:6110024"
/clone="IMAGE:6110024"
/tissue_type="melanotic melanoma, cell line"
/tissue_type="melanotic melanoma, cell line"
/tissue_type="melanotic melanoma, cell line"
/tissue_type="melanotic melanoma, cell line"
/tissue_type="melanotic melanomic reference"
/lab host="MIH MGC_112"
/clone_lib="NTH MGC_112"
/rocte="Organ: skin; Vector: pOTB7; Site_1: XhoI; Site_2:
/nocte="Organ: skin; Vector: poTB7; Site_1: XhoI; Site_2: Site_2: XhoI; Site_2: Site_2: XhoI; Site_2: XhoI; Site_2: XhoI; Site_2: XhoI; Site_2: Site_2: XhoI; Site_2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BU183451 669 bp mRNA linear EST 04-SEP-2002 AGENCOURT_7954125 NIH_MGC_112 Homo sapiens cDNA clone IMAGE:6110024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                         116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Trestererecetressecrives cesses 600
GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 669)
NIH-WGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                     175 GCGAATTTGTGAAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                 TCCAGGTCCTTCATTATTTTGTCCACAGGCGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                115 rrestratestratestratestrates and the restrates and the restrat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDNA Library Preparation: Rubin Laboratory
CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can l
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM2356 row: n column: 09
High quality sequence stop: 632.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACGCGGGGCGAGAGGCGAGCGCGGCGGCTGTGCCTTAGTAC 653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 669;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 646.4; DB 5;
Pred. No. 3.6e-147;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapber@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BU183451.1 GI:22697435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      53.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5', mRNA sequence.
BU183451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 53.9
Best Local Similarity 99.8
Matches 647; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                           295 '
   355
                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   55
                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BU183451/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                       g
                                                                                                                                                                        à
                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                          8
```

```
61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                    ORGANISM
                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                  /organism="Homo sapiens"
/mol_type="mRNA"
/db_ref="txxxxn:9606"
/db_ref="txxxxn:9606"
/clone=rMAGE:6294152"
/tissue_type="melanotic melanoma, cell line"
/tissue_type="melanotic melanoma, cell line"
/tlone_lib="WIH MGC 112"
/clone_lib="WIH MGC 112"
/clone_lib="WIH MGC 112"
/clone_Togan: skin; Vector: pOTB7; Site_l: Xhol; Site_2:
/clone_Togan: skin; Vector: Site_2:
/clone_Togan: skin; Cloned
/clone_Togan: skin; Cloned
/clone_Togan: skin; Cloned
/clone_Togan: skin; Stratagene) and
/clone_Togan: skin; Stratagene) and
/clone_Togan: skin; stratagene) and
/clone_Togan: skin; stratagene)
/clone_Togan: skin; stratagene)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITACATITICCTAAGIGICCTGATCTGCTCATGAAATCCTTCTATGGGGGGAAGCTGTGGG 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCC 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAACTAAAAAAGGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rereceracircrirecerresidareraciana a a a a contra contra a a a a a contra contra a a a a contra a cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCAAGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGGTGTGGTCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGGAAAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 646.4; DB 5; Length 940;
Pred. No. 3.7e-147;
0; Mismatches 1; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGACGGGGGGGGGGGGGGGGCGGGCTGTGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     53.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 647;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 6 A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             දි දි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
```

BG332809 681 bp mRNA linear EST 27-FEB-2001 602430639F1 NIH_MGC_18 Homo sapiens CDNA clone IMAGE:4548656 5', mRNA sequence.

BG332809/c LOCUS DEFINITION ACCESSION

```
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4548656"
/clone="IMAGE:4548656"
/tlssue_type="large cell carcinoma"
/tlssue_type="large cell carcinoma"
/tlssue_type="large cell carcinoma"
/lab_host="bullud (phage-resistant)"
/clone_lib="NIH_MGC_18"
/clone_lib="NIH_MGC_18"
/note="Organ: lung' Vector: pOTB7; Site_1: XhoI; Site_2:
/note="Organ: lung of Calgoria"
/note="Organ: lung of Calgoria"
/moratory of Gerald M. Rubin (University of California,
/moratory of Gerald M. Rubin (Oniversity of California,
/moratory of Gerald 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GIGAGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                              Craniata; Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                656 GGAACTAAAAAAGAAC-TTATTTATTGAGGGCAAGGGGATGCAAACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Greadececedeaarradecaaaaagereregaagecececerrrecearereres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITACATITIGCTAAGIGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          477 GCAGATTCCTTAAGCGACCCTTTGGGACACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                 Homo sapiens
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleosto
Bukaryota, Metazoa, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 681)
NIH-MGC http://mgc.nci.nih.gov/.
NIH-MGC http://mgc.nci.nih.gov/.
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: DCTD/DTP/Gazdar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can letuch through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM1238 row: m column: 09
High quality sequence stop: 660.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 645; DB 4; L
Pred. No. 7.8e-147;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
BG332809.1 GI:13139247
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  y Match 53.8%;
Local Similarity 99.8%;
hes 656; Conservative C
                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
```

120 537 180

597

9

240

360

297

357

420 237 480

```
TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 477
                                                                                                                                                                                                                       GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 417
                                                                                                                                                                                                                                                                 236 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTGTTAAGTAGCTTTTATCCCCA 177
                                    GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                     GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGCGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             176 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGGTGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tregregecerrandecerrangecenagedecerandecerangedecenagedecenagedeade
                                                                               AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGTGTCAAATGAGAGTTAGATTTATT
                                                                                                            596 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTGNTCAAATGAGAGTTAGATTTATT
                                                                                                                                            TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                       GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                  TCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGACGCGGGGGGGGGGGGGGGGGGGGGGTGTGCGTTCCTTAGTAC 653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                          121
                                                                                                                                                                         536
                                                                                                                                                                                                       181
                                                                                                                                                                                                                                    476
                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                               416
                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                          356
                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                       296
                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BU602356/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                    a
                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                           g
                                                                    8
                                                                                                    셤
                                                                                                                                   ò
                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BUS02376 692 bp mRNA linear EST 12-SEP-2002 AGENCOURT_8905908 NIH_MGC_142 Homo sapiens CDNA clone IMAGE:6452219
GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 118
                                                                                                           541 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 692)
NIH-MGC http://mgc.nci.nih.gov/
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                    CTGGACGCGGGCGGAGCGAGCGGCGGCTGTGCGCTTCCTTAGTACGTGC 657
                                                 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGCCGTGTTCCATTTGAGATGGCATT
                                                                                                                                       þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDNA Library Preparation: Michael Brownstein Laboratory CDNA Library Preparation: Michael Brownstein Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can bfound through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLCM2625 row: I column: 12
High quality sequence stop: 541.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   l. .692
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbe-r@mail.nih.gov
Tissue Procurement: NCI
                                                                                                                                                                                                                                                                                                                                          BU502376.1 GI:22806955
                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                          , mRNA sequence.
                                                                            177
                                                                                                                                                                                                    57
                                                                                                                                                                       601
                                                 481
                                                                                                                                                                                                                                                                 BU502376/c
                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                  RESULT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                    요
                                              ò
                                                                      g
                                                                                                    ò
                                                                                                                                                                      δ
```

540

117

900

57

EST 20-SEP-2002 Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I (bases 1 to 801.)
NIH-MGC http://mgc.nci.nih.gov/. National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999)
Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.ih.gov
Tissue Procurement: NCI CDNA Library Preparation: Michael Brownstein Laboratory cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://mage.llnl.gov.n column: 11 High quality sequence stop: 569. AGENCOURT 10014821 NIH_MGC_142 Homo sapiens cDNA clone INAGE:6496426 5', mRNA sequence. BU602356.1 GI:23254115 Homo sapiens (human) Homo sapiens

÷

Gaps

ö

Query Match 53.7%; Score 644; DB 5; Length 692; Best Local Similarity 99.1%; Pred. No. 1.4e-146; Matches 647; Conservative 0; Mismatches 6; Indels

```
/organism="Homo sapiens"
/mol type="mRNA"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/clone="IMAGE:5805962"
/tissue_type="epidermoid carcinoma, cell line"
/lab host="DH10B (phage-resistant)"
/clone lib=NUH MGC 101"
/clone lib=NUH MGC 101"
/note="organ: lung; Vector: pOTB7; Site_1: EcoR1; Site_2:
Xho1; cDNA made by oligo-dT priming. Directionally cloned
into EcoR1/Xho1 sites using the following 5' adaptor:
GGCACGAG(G). Library constructed by Ling Hong in the
laboratory of Gerald M. Rubin (University of California,
Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and
Supersoribt II RT (Life Technologies). Note: this is a
NIH_MGC Library."
                                                                                                             655 bp mRNA linear EST 02-APR-2002
AGENCOURT 7051984 NIH_MGC_101 Homo sapiens cDNA clone IMAGE:5805962
5′, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                              Eukaryoča; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 655)
  TTTACATTTGCTAAGTGTCCCGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGATICCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 655)
NIH-MCC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can letus://image.llnl.gov
http://image.llnl.gov
Plate: LLGNG046 row: a column: 03
High quality sequence stop: 624.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 655;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 53.2%; Score 638; DB 5; L
Best Local Similarity 100.0%; Pred. No. 4e-145;
Matches 638; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                               BQ073203.1 GI:19902249
                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                j. .655
                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                          BQ073203/c
                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                     ACCESSION
                                                                                 RESULT 20
                                                                                                                                                                                                                                                    VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DRIGIN
                                                                                                                                                                                                                                                                                                    SOURCE
  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                           /clone="IMAGE:6496426"
/tissue_type="mixed (pool of 40 RNAs)"
/lab_host="DH10B (T1-phage-resistant)"
/lab_host="DH10B (T1-phage-resistant)"
/clone_lib="NHH MGC_142"
/clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5'-ATTCTAGAGGCGGGGGGGGGCATG-dT(30)NN-3'. Full-length enriched library was constructed using the Clontech creator SMART kit and size-selected to contain the >0.5 kb size fraction (other fractions present in NIH_MGC_141). Library created in the laboratory of M. Brownstein (NIMH, NIH). Note: this is a NIH_MGC_Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTCTGCTTGTCAAATGAGAGTTAGATTTTTATTTTACATTTGCTAAGTGTCCTGATCTG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATTCCTTAAGCGGCCTTTGGGA 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAACTCTTATCAGGGAGGAGGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTGTCACA 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATG 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTC 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAG 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCCAATTAGGGAAAAGAAG 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CICTGGAAGCCCACTITGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACA 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCAGAGGGICITITIGATITICCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTC 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATG 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTTCCATGCCGTGTTCCATTTGAGATGGCATTTTGGTGTGGGTCCGTTGAAGCCTTGGCC 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCCAGGGGGATGCAAACAATACAAAAATTTCAAAGGCTTATCTGGTATTTAACTTTTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTCTGCTTGTCAAATGAGAGTTAGATTTTATTTTTACATTTGCTAAGTGTCCTGATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCCAGATTCCTTAAGCGACCCTTTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGGTCCGTTGAAGCCTTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGCAAGGGGATGCAAACAATACAAAA - TCAAAAGCTTATCTGGTATTTAACTTTTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 5; Length 807;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     53.4%; Score 640.6; DB 5, 99.2%; Pred. No. 9.6e-146; ive 0; Mismatches 4;
                                                     organism="Homo sapiens"
                                                                                                          /db xref="taxon:9606"
Location/Qualifiers
                                                                           type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Simil
Matches 654; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            528
                              source
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     유
상
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ۵ م
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      상
임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

þ

ö

Gaps

579

180 519

240

399

```
99.58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
  Best Local Similarity 99.5
Matches 638; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mRNA sequence.
BI825167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 22
BI825167/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                 a
                                                                       ò
                                                                                                  g
                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                              &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .1125.
| /organism="Homo sapiens" |
| // wol_type="mRNM" |
| // wol_type="mRNM" |
| // wol_type="mRNM" |
| // fissue_type="leukocyte" |
| // issue_type="leukocyte" |
| // issue_type="leukocytes |
| // issue_type="
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BMS49820 1125 bp mRNA linear EST 20-FEB-2002
AGENCOURT_6544034 NIH_MGC_118 Homo sapiens cDNA clone IMAGE:5745830
                                                                                                                                                                                                                                                                                540
                                                                                             420
                                                                                                                                                                                 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGACGGTCTTTTTGATTTTCCAAAAATCCA 219
                                                                                                                                                                                                                                                                                                    GCGAATTIGTGAAATGTAAACATCATGGTTTCCATGGGGGTGTTCCATTTGAGATGGCATT 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1125)
MIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999)
GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                          GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTCG
                                                                                                                                                                                                                                                                            GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: cgapbs-ramail.nih.gov
Tissue Procurement: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can bettp://image.llnl.gov
http://image.llnl.gov
plate: LLAMI2769 row: g column: 15
High quality sequence stop: 613.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGACGCGGGGGGGGGCGGGGGGGGGGTGTG 638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGACGCGGGCGGAGCCGAGCGCGGCGGGCTGTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BM549820.1 GI:18785543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5', mRNA
BM549820
                                             338
                                                                                                                                      278
                                                                                                                                                                                   421
                                                                                                                                                                                                                                218
                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                         158
                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                  98
                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38
301
                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 21
BM549820/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                     g
                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                   8
                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

DB 4; Length 1125;

53.1%; Score 636.2;

Query Match

```
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Bukaryota, Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E. (Abases 1 to 657)

I. (Abases 1 to 657)

Mational Institutes of Health, Mammalian Gene Collection (MGC)

I. Onpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/Linl at:

http://image.llnl.gov
                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BI825167 60.072039F1 NIH_MGC_119 Homo sapiens CDNA clone IMAGE:5164209 5',
                                                                                                                             597
                                                                                                                                                                                  120
                                                                                                                                                                                                                                       537
                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                117
                                                                                                                                                                                                                                                                                                                                                477
                                                                                                                                                                                                                                                                                                                                                                                                                                                       417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541 TTGGTGTGCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 536 TITACAITIGCTAAGIGICCIGAICHGCTGCTCAIGAAAICCTICIAIGGGGGAAGCIGIGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         296 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTATCCCCA
                                                                                                            GGAACTAAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATAAAAATCAA
                                                                                                                                                                                  61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                              121 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                 476 GCAGATTCCTTAAGCGACCTTTGGGAACACTCTTATCAGGGAGGAGGAACTCCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                             1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                       596 AAGCTTAICTGGTAITTAACTTTTCTTTTCTTTGCTTGTCAAATGAGAGTTAGAITTTATT
                                                                                                                                                                                                                                                                                                                                                                                                     GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                           Gaps
                         ö
                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACGCGGGGGGGGGGGGGGGGGGGGGGGTGTGGCGC 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              credacecedededededededededededededededed 16
Pred. No. 1.2e-144;
0; Mismatches 3;
                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BI825167.1 GI:15936717
```

```
Best Local Similarity
Matches 645; Conserv
                                           BE378444
                                                                     EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                       ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                    Bource
              DEFINITION
                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                        /tissue_type="medila"
/lab_host="newline"
/lab_host="DH10B"
/clobe_lib="NHH MGC_Lib="Ib"
/clobe_lib="NHH MGC_Lib"
/note="Organ: brain; Vector: pcWV-SPORT6; Site_l: Not!;
/note="Organ: brain; Vector: pcWV-SPORT6; Site_l: Not!;
Site_2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon cloning). Average insert size l.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                   517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GIGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCAGGTCCTTCATATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACCAAAATCAA 577
                                                                                                                                                                                                                                                                                                                                                                1 GGAACTAAAAAAAAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                            DB 4; Length 657;
                                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACGCGGGGCGAAGAGCGCGCGCGGGGCTG 636
                                                                                                                                                                                                                                                                                                         52.9%; Score 634.4; DB 4; 99.8%; Pred. No. 3.1e-144; ive 0; Mismatches 1;
                                                        organism="Homo sapiens"
                                                                    /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5164209"
             quality sequence stop: 651 Location/Qualifiers
Plate: LLAM11407 row: m
High quality sequence sto
                                                                                                                                                                                                                                                                                                                                    Matches 635; Conservative
                                       .657
                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                 576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       36
                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                          Best Local
                           FEATURES
                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

RESULT 23 BE378444/c

```
1. .645
/organism="Homo sapiens"
/mol_type="minstans"
/db xref="taxon:9606"
/dlone="IMAGE:3608925"
/tissue type="andometrium, adenocarcinoma cell line"
/thsoue type="andometrium, phage-resistant"
/lab host="DH108 (phage-resistant)"
/clone lib="NIH MGC_44"
/note="Organ: uterus; Vector: pOTB7; Site 1: XhoI; Site_2:
ECORI; CDNA made by oligo-dT priming. Directionally
cloned into ECORI/KhoI sites using the following 5'
adaptor: GGCACGAG(G). Library constructed by Ling Hong
in the laboratory of Gerald M: Rubin (University of
California, Berkeley) using ZAP-CDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    315 TAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCAT 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          466 cargagracreresegrecererrerrasgrascerrrarececasedarrreraaa 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               554
                                                                                                                                                                                         Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                               Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: gapba-remail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM262 row: i column: 22
High quality sequence stop: 639.
BE378444 11H_MGC_44 Homo sapiens cDNA clone IMAGE:3608925 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGAGTACTCTCAGGTCCTCCTTGTTAAGTAGCCTTTATCCCCAGCGAATTGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              406 TGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCCTTCTGCTTCATGTGTACTACAAAATAGTCATTGCAATGCAATGGCCCGCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      375 TATTTGTCCACAGCCAGGGGTCTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAGCTGGACGGGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           þ
                                                                                                                                                                                                                                                                       1 (bases 1 to 645)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         52.9%; Score 634; DB 2; Length 645; 99.8%; Pred. No. 3.8e-144; ive 0; Mismatches 0; Indels
                                                                                                            BE37844.1 GI:9323909
                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                            mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
```

333 360 273

540

93

900

453 240

셤 ઠે 셤 ઠે g ò

ઠે

```
Mammalia; Eutheria; Primates; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E. 1 (Dases I to 856)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov
Tissue Procurement: ATC

CONA Library Preparation: Ling Hong/Rubin Laboratory

CDNA Library Preparation: Ling Hong/Rubin Laboratory

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LiNL at:

http://image.llnl.gov
Plate: LLCM1220 row: k column: 24

High quality sequence start: 4

High quality sequence start: 4

High quality sequence start: 6

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BG335520 856 bp mRNA linear EST 27-FEB-2001
                                                                                    272 TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTTCCAAAAATCCA 213
                                                                                                                                                                                                                                                                                                                    TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                       GTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                         212 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAGGCCCGCAATTAGGGAAAAAAGAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                           GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGGTGTGTCCGTTGAAGCCTTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
                                                                 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              152 GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/db_xref="raxon:9606"
/clone="InABE:4541711"
/tissue_type="choriocarcinoma"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NIH_MGC_21"
                                                                                                                                                                                                                                                                                                                                                                                                    GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACGCGGGCGGAGAGCCGCGCGCGG 632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGACGCGGGCGGAGACGCGCGCGCGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .856
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BG335520.1 GI:13141958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mRNA sequence.
BG335520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                  361
                                                              181
                                                                                                      452
                                                                                                                                                                                      392
                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                           332
                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 25
BG335520/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                  셤
                                                                                                                                             ò
                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                              ò
                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .655
| /organism="Homo sapiens"
| mol_type="mRNA"
| db_xref="taxon:9606"
| clone="INAGE:5784763"
| /tissue_type="leiomyosarcoma"
| /tissue_type="leiomyosarcoma"
| /tissue_type="leiomyosarcoma"
| /tissue_type="leiomyosarcoma"
| /tispue="leiomyosarcoma"
| lab_host="bhioB" (phage-resistant)"
| /note="lorgan: utexue; / vector: pcMV-SPORT6; Site_1: NotI;
| /note="lorgan: utexue; / vector: pcMV-SPORT6; Site_1: NotI;
| site_2: Sall; Cloned unidirectionally. Primer: Oligo dT. Average insert size 2.1 kb. "
                                                                                                                                                                                                                                                                                                                                                                                                                                           BQ050753 655 bp mRNA linear EST 29-MAR-2002
AGENCOURT_6808933 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:5784763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
167
                                                                                                                           794
                                                                                                                                               854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information clone distribution information can be found through the I.M.A.G.E. Consortium/Link at:
http://image.llnl.gov
Plate: LLAM12870 row: m column: 20
High quality sequence stop: 654.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 572 AAGCTIAICIGGIAITITAACTITICTITICTICIGCIIGICAAAIGAGAGIIAGAITITAIT 513
                                                                                                                                                                                                                                                   47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 655)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 60
                                                            AGGCGGCGCGCGCGCGCGCGCCCTCGCCAGGCGCTCCCCCCAGCCCTC
                                                                                                                       MIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                        AACTTCTCTTCAGTAGAAACGGTCCTGCTCTCGAATATTTCAGGGC 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    52.7%; Score 632; DB 5; Length 655; 100.0%; Pred. No. 1.2e-143; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5', mRNA Bequence.
BQ050753
BQ050753.1 GI:19810093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.
Matches 632; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                         BQ050753
                                                                                226
                                                                                                                       735
                                                                                                                                                                166
                                                                                                                                                                                                          795
                                                                                                                                                                                                                                                 106
                                                                                                                                                                                                                                                                                          855
                                                                                                                                                                                                                                                                                                                                 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                RESULT 24
BQ050753/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
```

ઠે g ò qq

```
TITIACAITIGCTAAGIGICCIGAICTGCTCATGAAATCCTICTAIGGGGGAAGCIGIGG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    52.6%;
                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   643; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .666
                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                      CA431436
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                        DEFINITION
                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                        ACCESSION
                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                REFERENCE
                                                                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
           Site_2: EcoRI; cDNA made by oligo-dr priming.
Directionally cloned into EcoRI/KhoI sites using the following 5' adaptor: GGGACAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of Glifornia, Berkeley) using ZAP-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGCTTCAATTTCTGCCTACTTTCTTTCCCTTCTGCTGTCATGTGTACTACCAAAATAG 617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     137
                                                                                                                                                                                                                AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                             AAGCITATCTGGTATTAAACTTTTCTTCTC--GCTCTCAAATGAGAGTTAGATTTATTT 797
                                                                                                                                                                                                                                                                             121 TITACATITGCTAAGTGTCCTGAICTGCTCAI----GAAATCCTTCTAIGGGGGAAGC-T 175
                                                                                                                                                                                                                                                                                               GTAACATGTGCTAAGTGTTCCTGATTCGGCCTCATGAAAATCTTTCTATGGGGAAACCTT 737
                                                                                                                                                                                                                                                                                                                                          GTGGGGCAGATTCC--TTAAGCGACCCTTTGGGACAACTC--TTATCAGGAGGAGGAGCAAA 231
                                                                                                                                                                                                                                                                                                                                                                     graduscharticcertraaceaccectriceaacaactecriaticaeeaacaa 677
                                                                                                                                                                                                                                                                                                                                                                                                      C---TGCTCATTTCTGCCTAC-TTCTTTCCCTTCTGCT-TCATGTGTACTACAAA---- 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           556 ririccarcreracacresrecassrecricarrarririsrecassecassecrir 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      496 TTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGT 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCCATTTGAGATGGCATTTTGGTGTGCTCGTTGAAGCCTTGGCCGAGGCGCGGGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TICCATITIGAGATGGCATITIGGTGTGGTCGTTGAAGCCTTGGCCGAGGCGCGGGGAC 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTICCTIAGIACGIGCGGCGGGTGGGIAGAGGGAGGCGGCGCGGGAGCGGGAGGAGCCTG 701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCGGGCGCTCGGCAGGCGCTCCCCCAGCCCTGTCTCCTCCCCCCTCTTCCTGCCCCCGAC 761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCCCCGACCCCGGGGGGGGCCCACGCCCTGCCCTCGCTCCCGGACCCGCCTCGCAGA 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCCTCGCCCCCCAGACAGAGCGTTCTTGTAAACTTCTCTTCAGTAGAAACGGTCCTG 881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   283 TAGTCATTGCATGCAATGGTGAGGCCCGCA-ATTAGGGAAAAGAAGCTCTGGAAGCCCAC 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTG 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCCCGGACCCCGGGCGCGCGCCCACGCCCTCGCTCCCGGACCCGGCCTCGCAGA 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCCTCGCCCCCCCAGACAGGAGCGTTCTTGTAAACTTCTTCAGTAGAAACGGTCCTG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGGCCCTCTCCCCCCAGGCCCCCCCCCAGCCCTGTCTCCTCCCCCCTCTTCCTGCCCCCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rcarrigcargcaáargcrcacaccacarraaggaaaagaagcrcrgaaagcccac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGT
                                                                                                                                                                                   Gaps
/note="Organ: placenta; Vector: pOTB7; Site_1: XhoI;
                                                                                                                                                                                  21;
                                                                                                                                                   Length 856;
                                                                                                                                                   Score 631.4; DB 4; Length 8 Pred. No. 1.7e-143; 0; Mismatches 52; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCTCGAATATTTCAG 897
                                                                                                                                                   52.7%;
ilarity 91.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CICICGAATATITCAG 1
                                                                                                                                                                   al Similarity
783; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                      232 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      196 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                822
                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                         176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 136
                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                       736
                                                                                                                                                                                                                                                                                                                                                                                                                                    9/9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     462
                                                                                                                                                     Query Match
                                                                                                                                                                   Local
                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                            8 8
                                                                                                                                                                                                                                                                                                                             ⋧
```

```
/ Organism==menous sapiens...
/ woll type="menous sapiens...
/ woll type="menous sapiens...
/ woll type="menous sapiens...
/ clone="ull-H-FG1-bgp-m-06-0-UI"
/ tissue type="cell lines"
/ dev stage="Adult"
/ lab_host="blub (Life Technologies)"
/ dev stage="menous sapiens...
/ clone lib="NoT CGAP FG1"
/ clone lib="NoT CGAP FG1"
/ clone lib="NoT CGAP FG1"
/ note="Organ: Enchondiroma; Vector: pT7T3-Pac (Pharmacia)
/ not CGAP FG1 is a normalized cDNA library obtained from and Soares, Genome Research, 6:791-806, 1996. First strand
cDNA synthesis was primed with an oligo-dT primer
containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT7T3-Pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library tas sequence that is located between the Not I site and the (dT)18 tail. The sequence tag for this library is CGGTCACTC. The cell lines were provided by Dr. James Martin from the University of Lowa.

TAG IISSUE=Enchondroma cell line (Mix of ENI and EN2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D.

Bmail: Gapbb-r@mail.nih.gov
Tissue Procurement: James Martin
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Clone distribution information can be obtained
from Dr. M. Bento Soares, bento-soares@uiowa.edu
Seq primer: M13 FORWARD
POLYA-Yes.
       07-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60 AAAGCTTATCTGGTATTTAACTTTTCTCTTGCTTGTCAAATGAGAGTTAGATTTAT 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78
                                                                                                                                                                                                                                                                                         Craniata, Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                       Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 666)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Farante, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAACTAAAAAGAACTTTATTTATTGNAGGGCAAGGGGATGCAACAACAATACAAAATCA
CA431436
UI-H-FG1-bgp-m-06-0-UI.sl NCI CGAP_FG1 Homo sapiens CDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAACTAAAAAAGAACTTTATTTG-AGGGCAAGGGGATGCAAACAATACAAAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 666;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 630.8; DB 6;
Pred. No. 2.3e-143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAG_LIB=UI-H-FG1
TAG_SEQ=CGGTCACTC"
                                                                                                               CA431436 CA431436.1 GI:24794162
EST.
```

```
BF686811.1 GI:11972219
                                                                                            52.5%;
ilarity 99.8%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mRNA sequence.
                                                                                            Query Match
Best Local Similarity
Matches 640; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                          9
                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 28
BF686811/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                       ORIGIN
                                                                                                                                           ð
                                                                                                                                                            셤
                                                                                                                                                                                      ò
                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                            BMS46362 10-FEB-2002
AGENCOURT_6498563 NIH_MGC_125 Homo sapiens CDNA clone IMAGE:5722924
                                  GTCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCC 419
                                                                                                                                                                             AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCC 479
                                                                                                                                                                                                                            AGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                             GGTGAGGCCCGCAATTAGGGAAAAAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                            TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Momo saptens (numman, momo saptens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; En amamalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Matachal Institutes of Health, Mammalian Gene Collection (MGC)

Nopublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: Gapbs-r@mail.nih.gov

Tissue Procurement: Invitrogen

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:

http://mage.linl.gov

Plate: LiAM12709 row: m column: 05

High quality sequence stop: 616.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone lib="NIH MGC 125"
/note="Organ: ovary" (pool of 3); Vector: pCMV-SPORT6;
Site_1: EcoRV (destroyed); Site_2: Not1; RNA source pool
of three ovaries, from females ranging in age from 38 to
                       GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCAT
                                                                                                                                                                                                                                                                                                                                                                      GCTGGACGCGGGGGGGAAAGGCGAGCGGGCGGGCGGGCTGTGC 664
                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5722924"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    lab host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5', mRNA sequence.
BM546362
BM546362.1 GI:18779258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . .687
                                                                                                                                                                                                                                                                                    499
139
                                             199
                                                                     240
                                                                                            259
                                                                                                                    300
                                                                                                                                         319
                                                                                                                                                                360
                                                                                                                                                                                        379
                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                           009
                                                                                                                                                                                                                                                                                                                                                                                 619
                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 27
BM546362/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                 g
                                       g
                                                             ઠે
                                                                                      a
                                                                                                                 ò
                                                                                                                                   엄
                                                                                                                                                         ઠે
                                                                                                                                                                                                              8
                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                        ઠે
                      ò
```

```
49 yo. Library is oligo-dT primed and directionally cloned (ECORV site is destroyed upon cloning). Average insert size 2.1 kb, insert size range 1-3.5 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 036."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BF686811 938 bp mRNA linear EST 22-DEC-2000 602140775F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4301946 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              539
                                                                                                                                                                                                                                                                                                                                                                                                            AAAGCTTATCTGGTATTTAACTTTTCTCTCTGCTTGTCAAATGAGAGTTAGATTTAT 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTGAGGCCCGCAATTAGGGAAAAGACTCTGGAAGCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               599
                                                                                                                                                                                                                                                                                                                                                       602
                                                                                                                                                                                                                                                                                                                                                                                                                                                           542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria,
1 (bases 1 tó 938)
11-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480 AGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 AGCGAATTTGTGAAATGTAAACATGGTTTCCATGGCGTGTTCCATTTGAGATGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITGGTGTGCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601 AAAGCTTATCTGGGATTTTAACTTTTGTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420 AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCC
                                                                                                                                                                                                                                                                                                           GGAACTAAAAAAGAAC-TTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCA
                                                                                                                                                                                                                                                                                                                                                          661 GGAACTAAAAAAGAACTTTTATTTTAAGGGGCAAGGGGATGCAAACAATACAAAATCA
                                                                                                                                                                                                          Length 687;
                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                actronacecedecenandesecenecedecedectrones 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTGGACGCGGGGGGGGGGGGGCGCGGCGGCTGTGG 21
                                                                                                                                                                                                       Score 629; DB 4; L
Pred. No. 6.5e-143;
0; Mismatches 0;
```

```
BE745512 990 bp mRNA linear EST 15-SEP-2000 601579889F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928606 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /Lissue type="adenocarcinoma cell line"
/lab host="NH10B (phage-resistant)"
/lab host="NH10B (phage-resistant)"
/lone="Torgan: o'vary; Vector: pOTB7; Site 1: XhoI; Site 2:
BCORI; CDNA made by oligo-dT priming. Directionally
aloned into BCORI/XhoI site susing the following 5'
adaptor: GGCAGGAG(G). Size-selected >500bp for average
insert size 1.8kb. Library constructed by Ling Hong in
the laboratory of Gerald M. Rubin (University of
California, Berkeley) using 2AP-CDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     635 GGAACTAAAAAAAAACTTTATTTAAGGGGCAAGGGGATGCAAACGATACCAAAATCAA 576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTTATCTGGTATTTAACTTTTCTTTCTGTCTTGTCAAATGAGAGTTAGATTTTTTT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I Dases 1 to 990. NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution inGC clone distribution information can be
found through the I.M.A.G.B. Consortium/LLNL at: image.llnl.gov
Plate: LLCW760 row: a column: 23
High quality sequence stop: 650.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          108 TTTGGTGTGGTCGGTTGAAGCCTTGGCCGAGGCGCGGCGGCGACGCTGGGCGAGCTGGGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 990;
                                           646
                                           600 GCTGGACGCGGGCGGAGAGCGAAGCGCGGCGGCTGTGCGCCTTCC
                                                          48 GCTGGACGCGGGGGGGGAGAGCGGGGGGGGGGGGGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 628.6; DB 2;
Pred. No. 8.6e-143;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .990
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:3928606"
                                                                                                                                                                                                                                                                       BE745512.1 GI:10159504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            52.4%;
ilarity 99.4%;
Conservative
                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                mRNA sequence.
BE745512
                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   631;
                                                                                                                                                                                                                                                                                             EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         515
                                                                                                                                              RESULT 29
BE745512/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                           à
                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="mRNA"
/db_trafe" taxon:9606"
/db_trafe" taxon:9606"
/dlone="MMAGE:4301946"
/tissue_type="leiomyosarcoma cell line"
/tissue_type="leiomyosarcoma cell line"
/tissue_type="leiomyosarcoma cell line"
/tobnet="MHIMGE 46"
/clone lib="NHIMGE 46"
/clone lib="NHIMGE 46"
/noce="Organ: uterus; Vector: pOTB7; Site_1: Xho1; Site_2:
ECORI; cDNA made by oligo-dT priming. Directionally cloned
into EcoRI/Anol sites using the following 5' adaptor:
GGACGAGG(G). Size-selected 5:00bp for average insert size
1.8kb. Library constructed by Ling Hong in the laboratory
of Gerald M. Rubin (University of California, Berkeley)
using ZAP-cDNA synthesis kit (Stratagene) and Superscript
II RT (Life Technologies). Note: this is a NIH_MGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGATICCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCCAGGTCCTTCATTATTTTGTCCACAGGCGTCTTTTTGATTTTCCAAAAATCC 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAACCTAAAAAAGAACTTTATTTATTGAGGGCAAGGGTATGCAAACAATACCAAAATCAA 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITACATITGCTAAGIGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTGCCTACTTCTTTCCCTTCTGCTTCATGTGTACTAC-AAAATAGTCATTGCATGCAAT 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Greensercerrearratirierecaeseceaesecererririearrirecaaaaree 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     228 AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCC 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   168 AGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTGCCATCTCTACACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u> AGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTCTTCTCTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGAGCTGGGCGAGCTGGGCGA
                                                                                                                           be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                        CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLCM1163 row: e column: 19
High quality sequence stop: 654.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 938;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 628.6; DB 2;
Pred. No. 8.5e-143;
0; Mismatches 4;
  Ph.D.
                       Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
  Contact: Robert Strausberg,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      52.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             642;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                  FEATURES
  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      중
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      $ B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
```

ö

Gaps

9

516

Thu

```
651;
                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 31
CA307888
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                 셤
                                                                                                                                                                                                                                       유
                                                      유
상
                                                                                                                                                     ò
                                                                                                                                                                          g
                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                    8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                   ઠે
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

E 1 (bases 1 to 674)

S NIH-MGC http://mgc.nci.nih.gov/.

L Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: DCTD/DTP

CDNA Library Preparation: Life Technologies, Inc.

Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

Plate: LLAM12001 row: i column: 06

High quality sequence stop: 663.

Location/Qualifiers

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/nol_type="mRNA"
/dol_type="mRNA"
/dol_type="mRNA"
/dol_ore='IMAGE:532973"
/tissue_type="mammary adenocarcinoma, cell line"
/lab.hoste='DH10B (phage_resistant)"
/clone_lib="NIH_MGC 87"
/note="Organ: breast; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sal1; cloned unidirectionally; oligo-dT primed.
Average insert size 1.383 kb. Library enriched for full-length clones and constructed by Life Technologies.
Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                       BI858258 674 bp mRNA linear EST 10-OCT-2001
                                                                                                                                                                   480
                                                                                                           420
                                                                                                                                                                                                                              540
                                                                                                                       TIGGIGICCICTIGAAGCCTIGGCCGAGGCGCGCGCACGCIGGGCGACGCTGGGCGAGC
                                                                                                                                                                                                                                                          96
                                                                                                                                                                                                                                                                                                       GCGAATTTGTGAAATGTAAACATCATGGCTTCCATGGCGGTGTTCCATTTGAGATGGCATT
                                                GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                      TCCAGGTCCTTCATTATTTTGTCCACAGCCAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                            GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                  CTGGACGCGGGCGGAGAGCCGAGCGCGCGGCCT 635
                                                                                                                                                                                                                                                                                                                                                                CTGGACGCGGGGCGAAGGCGAGCGCGCGCGGGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BI858258.1 GI:15999005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA sequence.
BI858258
                                                                          335
                                                                                                        361
                                                                                                                                    275
                                                                                                                                                                                               215
                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                          155
                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                  601
                                              301
                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 30
BI858258/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                g
                                                                 g
                                                                                                    8
                                                                                                                            g
                                                                                                                                                      ठे
                                                                                                                                                                                       a
                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                      셤
                                   ે
```

Score 628.4; DB 4; Length 674; Pred. No. 9.1e-143;

52.4%;

Query Match Best Local Similarity

```
Tuncount cauter institute, cancer Genome Anatomy Project (CGAP),
Tuncor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.iih.gov
Tissue Procurement: Dr. Gary W. Hunninghake, U of I
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Clone distribution information can be obtained
from Dr. M. Bento Soares, bento-soares@uiowa.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A linear EST 05-AUG-2004
Homo sapiens cDNA clone
                                                                         595
                                                                                                            119
                                                                                                                                                                                                                           475
                                                                                                                                                                                                                                                                                                       415
                                                                                                                                                                                                                                                                                                                                                                                355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            598
                                                                                                                                                                                        179
                                                                                                                                                                                                                                                                   239
                                                                                                                                                                                                                                                                                                                                            299
                                                                                                                                                                                                                                                                                                                                                                                                                       359
                                                                                                                                                                                                                                                                                                                                                                                                                                                           295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 538
                                     59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Meteria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 686)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                         GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACGGAAAAATCA
                                                                                                        354 GGTGAGGCCCCCAATTAGGGAAAAGAACTCTGGAAGCCCACTTTGCCATCTCTACACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCCAGGTCCTTCATTATTTTGTCCACAGGCGAGGGTCTTTTTGATTTTCCAAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGGAACTCCTTTTCCATGAGGTGCTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCA
                                                                                                                                                                                        120 TITTACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG
                                                                                                                                                                                                         AGGGAACTCCTTTTCCATGAGTA-CTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATAC-AAAAATCA
                                                                                                                                                                                                                                                                                                                                            GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCC
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
7
1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CA307888 686 bp mRNA UI-H-FT1-bib-a-01-0-UI.sl NCI CGAP_FT1 Hor
Mismatches
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CA307888.1 GI:24470942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CA307888
                                                                                                                                                                                                                                                                                                                                            240 '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            539
```

```
1...811
| Organism="Homo sapiens"
| /organism="Homo sapiens"
| /mol type="mRNA"
| /mol type="mRNA"
| /db_xref="taxon:9606"
| /clone="INAGE:5191564"
| /lab host="DH10B"
| /lab host="DH10B"
| /clone=line="DH10B"
| /clone=l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 811)

S NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Longublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The 1.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:

http://mage.llnl.gov

Plate: LiAM11479 row: a column: 05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               upon cloning). Average insert size 1.5 kb, insert size range 1.3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 019. Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BI488419 811 bp mRNA linear EST 28-AUG-2001
603020917F1 NIH_MGC_114 Homo sapiens CDNA clone IMAGE:5191564 5',
                                                                                       TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 438
                                                                                                                                                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCCA 480
                                                                                                                                                                                                                                                                                   GCGAATITGTGAAATGTAAACAICATGGTITCCAIGGCGTGTICCAITIGAGAIGGCAIT 540
                                                                                                                                                                                                                                                                                                                                                                                                319 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 378
                                                                                                                                                                                                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 498
                                                                                                                                                                                                                                                                                                                   558 rrcererecerreasecerreaceceasececeaseceseseseseseseseseses 617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACGCGGGGGGGGGGGGGGGGGGGGGCTGTGCGTTCCTTAGTACGTGC 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 811;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 52.4%; Score 627.8; DB 4; Best Local Similarity 98.2%; Pred. No. 1.3e-142; Matches 659; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              High quality sequence stop: 669.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BI488419
BI488419.1 GI:15327647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                          361
                                                                                                                  379
                                                                                                                                                                          421
                                                                                                                                                                                                                              439
                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BI488419/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                           8
                                                                                                                                                                       ò
                                                                                                                                                                                                                음
                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAGGCCCGCAATTAGGGAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 AAGCTTATCTGGTATTTAACTTTTCTTTCTGTGTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCTTATCTGGTATTTAACTTTTCTTTCTTCTGTGTGAATGAGAGTTAGATTTATT 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      139 TTTACATTTGCTAAGTGTCCTGATCTGCTGAAATCCTTCTATGGGGGAAGCTGTGGG 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAAATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGCCTACTTCTTTCCCTTCTGCTTCTACTACTACAAATAGTCATTGCAATG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    52.4%; Score 628.2; DB 6; Length 686; 99.2%; Pred. No. 1e-142; ive 0; Mismatches 3; Indels 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=Human Lung Alveolar Macrophage
                                                                                                                                                                                              /tissue_type="Alveolar Macrophage"
/dev_stage="Adult"
/lab_host="DH10B (Life Technologies)"
                                                                                                                                                                    /clone="UI-H-FT1-bib-a-01-0-UI"
                                                                                     organism="Homo sapiens"
                                                                                                            /mol_type="mRNA"
/db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAG_LIB=UI-H-FT1
TAG_SEQ=GGCCATGCCG"
                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 99.2
Matches 652; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                             source
                             FEATURES
```

ద

g ò

ò

음 & ద ò g

셤

ò g ઠ g ò a ઠે ద ઠે 음 δ g ò

ò 셤 ò

```
/done lib="NCI CAPP Chi"
//clone lib="NCI CAPP Chi"
//clone lib="NCI CAPP Chi"
//note="Organ: Left Pelvis; Vector: pT7T3-Pac (Pharmacia)
with a modified polylinker; Site l: EcoR I; Site 2: Not I;
NCI CGAP Chi is a cDNA library containing the following
tissue(s): Chondrosarcoma Grade II. The library was
constructed according to Bonaldo, Lennon and Soares,
Genome Research, 6:791-806, 1996. First strand cDNA
synthesis was primed with an oligo-dT primer containing a
Not I site. Double stranded cDNA was ligated to an EcoR I
adaptor, digested with Not I, and cloned directionally
into pT7T3-Pac vector. The oligonucleotide used to prime
the synthesis of first-strand cDNA contains a library tag
sequence that is located between the Not I site and the
mannance containing and the mannance contains a library tag
  Clone Distribution: Clone distribution information can be obtained from Dr. M. Bento Soares, bento-soares@uiowa.edu
Seg primer: M13 FORWARD
POLYA=Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTCTTTAAGTAGCCTTTATCCCC 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  79 AAAGCTTATCTGGTATTTAACTTTTCTTTCTCTGTGCTAATGAGAGTTAGATTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTGAGGCCCGCAATTAGGGAAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAACTAAAAAAGAACTTTATTTATTTTTTGGGGGAAGGGGATGCAACAAAAAATACAAAAAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTCCAGGTCCTTCATTATTTTGTCCAGGCCAGAGGGTCTTTTTGATTTTCCAAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAACTAAAAAAGAACTTTATTTAT-TGAGGGCAAGGGGGATGCAAACAATACAAAAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCAGATTCCTTAAGCGACCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGATTTTCCAAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGGAACTCCTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 627; DB 6; Length 66 Pred. No. 2e-142; 0; Mismatches 5; Indels
                                                                                                                                                                                                /tissue_type="Chondrosarcoma Grade II"
/dev_stage="Adult"
/lab_host="DH10B (Life Technologies)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAG_LISSUE=grade-2-chondrosarcoma
TAG_LIB=UI-H-EZ0
                                                                                                                                        /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="UI-H-EZ0-bak-j-10-0-UI"
                                                                                                                          sapiens"
                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAG_SEQ=ATCTAATATG"
                                                                                                                        organism="Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 99.1%;
Matches 641; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   499
                                                                                                       source
                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CA412335 665 bp mRNA linear EST 07-NOV-2002
UI-H-EZO-bak-j-10-0-UI.sl NCI CGAP Chl Homo sapiens cDNA clone
UI-H-EZO-bak-j-10-0-UI 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Steven Gitelis/ Rush Presbiterian, Dept. of
Orthoapedics
                                                                                120
                                       612
                                                                                                                      552
                                                                                                                                                             180
                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                  492
                                                                                                                                                                                                                                                                               432
                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAACTCCTT-TTCCATGAGTACTCTCAGGTCCTTTGTTAAGTAGCCTTTATCCCC 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCAT 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTGGGCGAGCTGGACGCGGGGGGGGGGCGCGCGGCGGGCTGTGCGCCTTTAG 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of Iowa
    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates; Catarrhini, Hominidae, Homo. I (basea 1 to 665)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDNA Library preparation: Dr. M. Bento Soares, University of Iowe CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAACTAAAAAAAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                    AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTATT
                                                                                                             AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTAAATGAGGTTAGATTTTATT
                                                                                                                                                         TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                              TTGACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                     GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                            GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                  GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTTCACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGAC------GCTGGGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CA412335
CA412335.1 GI:24774986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACGTGCGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
н
                                       671
                                                                                                                   611
                                                                                                                                                                                                551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                         121
                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                              61
                                                                                                                                                                                                                                                                             491
                                                                                                                                                                                                                                                                                                                                                         431
                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                          371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 33
CA412335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
```

용. 장 셤 .≿ 셤

138

119

29 78 198

179

258 299 318 359

378

419 438 498

539 558

g

ò

ò 셤

```
BQ948995
AGENCOURT_8912008 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:6464957
5', mRNA sequence.
BQ948995
BQ948995
ES7.
                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                 420
TITACATITGCIAAGIGICCIGAICIGCICAIGAAAICCITCIAIGGGGGAAGCIGIGGG 183
                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                     304 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTTGGAAGCCCACTTTGCCATCTCACACTGG 363
                                                                                                                                                                                                                                                                                                                      423
                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                             483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Organ: uterus; Vector: pCMV-SPORT6; Site_1: NotI;
                                                                                                                                                                                                                                                                                                        364 TCCAGGICCTTCATTATTTTGICCACAGCCAGAGGGTCTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM13986 row: o column: 06
High quality sequence stop: 640.
                                                                                         184 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                              424 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTACCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                544 NIGGIGLEGETCCGTIGAAGCCTIGGCCGATGCGCGGCGGAGCCTIGGCGCGAGCTGGGCGAG
                                                                                                                                 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                   TCCAGGTCCTTCATTATTTTGTCCACAGCCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                             GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541 TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGACGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (Dases 1 to 641)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Etausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone="IMAGE:6464957"
/tissue type="laiomyosarcoma"
/lab host-"DH10B (phage-resistant)"
/clone_lib="NIH_MGC_71"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGACGCGGNGCGGAGAGCGCGCGCGGCCTGTG 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .641
                     124
                                                                                                                                 241
                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 35
BQ948995/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                    8
                                                                                         셤
                                                                                                                              à
                                                                                                                                                              g
                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EST 22-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                      618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryoff, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

I. (bases 1 to 641)

Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S., Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M., Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F., Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R. WashU-NCI human EST Project
Unpublished (1997)
Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL ; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Seq primer: -40UP from Gibco
High quality sequence stop: 470.
Location/Qualifiers
                   AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGATTAGATTTTATT
 TTTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGCGGACGCTGGGCGGAGCTGGGCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGAACTAAAAAAGAACTTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                        at30b06.xl Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2373491 3' similar to gb:M38591 CALPACTIN I LIGHT CHAIN (HUMAN);, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 641;
                                                                       GCTGGACGCGGGGGGAGAGCGCGCGCGGGCTGTGCGCCTTCC 646
                                                                                             GCTGGACCCGGAGCGGATAGGCGAGCGCGGCCGGCCTTCC 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 626.4; DB 1;
Pred. No. 2.8e-142;
0; Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:2373491"
                                                                                                                                                                                                                                                                                                  AI749536.1 GI:5127800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               52.2%;
ilarity 98.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .641
                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                 AI749536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    630;
                                    559
                                                                         009
                                                                                                          619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                  RESULT 34
AI749536
LOCUS
                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DRIGIN
```

셤 ò В ò

Thu

a

ઠે

g ઠે g ò 유 ò 엄 8 8 ò 쉱 ઠ

8

```
21 TAGAGGGAGGCGGTGCGGGAG 1
                                                                                                                                                                                                                                                                                                          Local Similarity
les 653; Conserv
                                                                                                                                                                                                                                                                                                                                                                           678
                                                                                                                                                                                                                                                                                                                                                                                                       68
                                                                                                                                                                                                                                                                                                                                                                                                                                621
                                                                                                                                                                                                                                                                                                                                                                                                                                                          128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 899
                                                                                                                                                                                                                                                                                                Match
                                                                                                          source
                                                                                                                                                                                                                                                                                                                         Matches
                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                Query
                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              요. 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BI093074 697 bp mRNA linear EST 20-JUN-2001
                                                                                                                                                                                                                                                                                                                      TTGGTGTGGCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCAAG
                                                                                                                                                            120
                                                                                                                                                                                       506
                                                                                                                                                                                                                                           446
                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                               386
                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                       266
                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                            206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATCCCCA 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 697)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nh.gov
Tissue Procurement: ATCC
  Primer: Oligo dT
                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                  GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCAGGTCCTTCATTATTTTGTCCACAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                   625 GGAACTAAAAAGGAACTTTATTTATTGAGGGCAAGGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                            AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                         TITACATITIGCIAAGIGTCCTGAICTGCTCATGAAAICCTICTAIGGGGAAGCTGIGGG
                                                                                                                                                                                                                                                                    GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                TCCAGGTCCTTCATTTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  145 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                      GGAACTAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                Gaps
                                                                                ö
                                                      Length 641;
                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cDNA Library Preparation: Life Technologies, Inc
Site 2: Sall; Cloned unidirectionally. Average insert size 2.1 kb. "
                                                      DB 5; Le 6.1e-142;
                                                    52.1%; Score 625; DB
100.0%; Pred. No. 6.1.
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ч
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGACGCGGGGGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGACGCGGGGGGAGAGGCGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mRNA seguence. _ _ BI093074
BI093074.1 GI:14511404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                    Query Match 52.1
Best Local Similarity 100.
Matches 625; Conservative
                                                                                                                                                                                       565
                                                                                                                                                                                                                                          505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                   385
                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                     325
                                                                                                                                                                                                                                                                                                                                                                                                                                                            265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BI093074/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 36
                           ORIGIN
```

g

8 q ઠે ద

ઠે

```
307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       667
                                                                                                                                                                                                                                                /cell_line="MGG36"
/lab host="DH108"
/clone lib="NHH MGC 10"
/note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: Not1;
/site_2: SalI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.5 kb. Library prepared by Life Technologies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              261 CCTTTCCATGAGTACTCTCAGGTCCTCCTTGTTAAGTAGCCTTTATCCCCAGGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141 GGTCCGTTGAAGCCTTGGCCGAGGCGGGCGACGCTGGGCGAGCTGGACGTGGACGTGGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           561 TTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGGCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGGAGCTGGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGGGCGGAGAGCGCGCGCGCGGCTGTGCGCCTTCCTTAGTACGTGCGGCGGGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTGGTATTTAACTTTTCTTTTCTTGCTTGTCAAATGAGAGTTAGATTTTATTTTACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rengenariaaernerecrirerengeriereaandagaernagarringarringaear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TIGCTAAGIGICCIGAICTGCTCAIGAAAICCTICTAIGGGGGAAGCTGTGGGGCAGAIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         201 TGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
cDNA Library Arrayed by: Incyte Genomics, Inc.
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/Link at:
http://image.llnl.gov
Plate: LiAM11029 row: n column: 18
High quality sequence stop: 671.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ٠.
ص
                                                                                                                                                                                                                                                                                                                                                                                                                                                              25; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                      Score 625; DB 4; L
Pred. No. 6.2e-142;
0; Mismatches 25;
                                                                                                                                                      1. .697
/organism="Homo sapiens"
/mol_type="mRNA"
/db xref="taxon:9606"
/clone="IMAGE:4999505"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAGAGGGAGGCGGCGGGAG 688
                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                      52.1%;
ilarity 95.9%;
Conservative
```

```
21C Frontier Korean EST Project 2001
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .625
/organism="Homo sapiens"
/mol_type="mRNA"
/db zref="taxon:9606"
/clone="SISNU582-3-G06"
                                                                                                                                                                                                                       CTGGACGCGGGCGAGAGGCGAGCG 626
                                                                                                                                                                                                                                    CTGGACGCGGGCGGACG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       High quality sequence stop: 6 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                         BM767559.1 GI:19097174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Kim YS
Genome Research Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                               mRNA sequence.
BM767559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kim, Y.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                            EST.
                                                                                                                                              541
421
                                                                                                                                                                                   86
                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                       26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                   BM767559/c
                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                RESULT 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                 셤
                                                                                                                                                                               유
                          셤
                                                                    ò
                                                                                                                                            ð
                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue_type="embryonic stem cell, retinoic acid and midogen-treated hBS cell line H7"
/clone_lib="GRN PRENEU"
/note="oligo dT_primed, full-length enriched cDNA library from hBS cell line H7 (p29) maintained in feeder-free conditions. Embryoid bodies were generated in the presence of all-trans retinoic and mitogens."
                                                   CN271600 637 bp mRNA linear EST 16-MAY-2004
17000600075087 GRN_PRENEU Homo sapiens CDNA 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGTCAAATGAGAGTTAGATTTATT 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITACAITIGCIAAGIGICCIGAICIGCICAIGAAAICCIICTAIGGGGGAAGCIGIGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAGGCCCGCAATTAGGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGICCITCATTATTTIGICCACAGCCAGAGGGICTTTTTGATTTTCCAAAAAICCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              266 rccaggrccrrcarrarrrrgrccacaggccagaggrcrrrrrgarrrrccaaaarcca 207
                                                                                                                                                                                                                                Brandenberger, R., Wei, H., Zhang, S., Lei, S., Murage, J., Fisk, G.J., Li, Y., Xu, C., Fang, R., Guegler, K., Rao, M.S., Mandalam, R., Li, Y., Xu, C., Fang, R., Guegler, K., Rao, M.S., Mandalam, R., Tebbowski, J and Stanton, L.M.

Transcriptome characterization elucidates signaling networks that control human ES cell growth and differentiation

Control human ES cell growth and differentiation

Control Estandenberger R.

Regenerative Medicine
                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGAGGAGGGACGAACTGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAACTAAAAAGAACTTTATTTATTGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       51.9%; Score 622.8; DB 7; Length 637; llarity 99.7%; Pred. No. 2.1e-141; Conservative 0; Mismatches 2; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                    230 Constitution Drive, Menlo Park, CA 94025, USA Tel: 650 473 6658 Fax: 650 473 760 Email: rbrandenberger@geron.com
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: rbrandenberger@geron.com
Insert Length: 637 Std Error: 0.00.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                        CN271600.1 GI:47288014
                                                                                                                                            sapiens (human)
                                                                                                                                                                                                                       (bases 1 to 637)
                                                                                                                                                                                                                                                                                                                                                                                       Geron Corporation
                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                              Ношо
                                                                                                                                                                 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             624;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S:
Matches 624,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
             RESULT 37
CN271600/c
                                                 LOCUS
DEFINITION
                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                            JOURNAL
COMMENT
                                                                                     ACCESSION
                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

```
/tissue type="Ascites"
/cell_type="Lymphoblast-like"
/cell_tine="SNU-5"
/lab_host="Topl0F"
/clone lib="S18NU-5"
/loce="Topl0F"
/clone lib="S18NU-5"
/competent cells E. coli Toplof" by electroporation method.
/clone lib="S18NU-5"
/clone lib=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BM767559 625 bp mRNA linear EST 04-MAR-2002
K-EST0050042 SISNU5s2 Homo sapiens CDNA clone SISNU5s2-3-G06 5',
                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 625)
Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R.,
Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                    206 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTGTTAAGTAGCCTTTATTATCCCA 147
                                                                                                                                                                                                                                                                                                                                                                                       146 GCGAATTIGIGAAAIGTAAACAICAIGGITICCAIGGCGIGITCCATTIGAGAIGGCATI 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rregrerectreaaccrregeceaacceaeceaeceaecereceaecraecraeceae 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                     481 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Korea Research Institute of Bioscience & Biotechnology 52 Eceun-dong Yuseong-gu, Daejeon 305-333, South Korea Tel: +82-42-860-4470 Fax: +82-40-860-4409 Email: yongsung@mail.kribb.re.kr Plate: 3 row: G column: 06
```

ORGANISM

```
sequencing about 2,000 ~ 3,000 colonies in original cDNA library, the abundant cDNAs were selected and amplified by PCR reaction using vector region primer including T7 promotor as 5' primer and N(dT)14 as 3' primer. The PCR products were used as template for synthesis of biotinylated single stranded RNA by in vitro transcription reaction. The synthesized RNA probes were hybridized with antisense single stranded cDNAs prepared from original liberary and incubated with avidin-gel. After removing DNA-RNA hybrids by centrifuge, the subtracted cDNA libraries were constructed by transformation of the remaining DNA into competent cells E. coli Toplof' with electroporation method."
                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                    228
                                                                                                                                                                                                                                                                                                                                                                                                                                                     288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTGTTAAGTAG 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTTTATCCCCAGGGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGAGATGGCATTTTGGTGTCCGTTGAAGCCTTGGCCGAGGCGCGGGGGCGCCGGC 588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TIAGATITITATITITACATITIGCIAAGIGICCTGAICTGCTCATGAAATCCTICTATGGG 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAAGCCCACTTTGCCA 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCCACAGGGCCAGAGGGTCTTTTTGATTT 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCTACACTGGTCCAGGTCCTTCATTATTTTGTCACAGCCAGAGGGTCTTTTTGATTT 266
                                                                                                                                                                                                                                                                                                                                                                                                  TTAGATTTTTATTTTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGG 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAG 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTCATGTACTACAAAATAGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTTTATCCCCAGCGAATTGGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATT
                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                              Length 625;
                                                                                                                                                                                                                                                                           2; Indels
                                                                                                                                                                                                                                         Score 621.8; DB 4;
Pred. No. 3.7e-141;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTACGTGCGGCGGGTGGGTAGAGG 1
                                                                                                                                                                                                                                           51.9%;
                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                          623;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   549
                                                                                                                                                                                                                                            Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                      109
                                                                                                                                                                                                                                                                                                                                                                                                     565
                                                                                                                                                                                                                                                                                                                                                                                                                                   169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     589
                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                               DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    장. <sup>접</sup>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
```

GI:19198541

mRNA sequence. BM842132 BM842132.1 GI:

ACCESSION VERSION KEYWORDS SOURCE

BM842132/c LOCUS

DEFINITION

EST. Homo sapiens (human)

```
/Globel Ilde=Sissundia.
// Clobel Ilde=Sissundia.
// Clobel Ilde=Sissundia.
Site 2: Not1; The poly (A) + RNA was dephosphorylated with bacterial alkaline phosphatase (BAP) and then decapped with tabacco acid pyrophosphatase (BAP) and then decapped intact mRNA was ligated with DNA-RNA linker including BCOR I site by treatment of T4 RNA ligase and the first strand cDNA was synthesized from oligo dT-selected mRNA by priming with dT-tailed vector. The GT-tailed vector was adjusted to have about 60nt. The CDNA vector was circularized with B. coli DNA ligase after digestion of ECORI which site is also included in vector. An RNA strand converted to a DNA strand by Okayama-Berg method. The obtained cDNA vectors were used for transformation of competent cells E. coli TOPOIC, by electroporation method. The CDNA libraries constructed by this method are full-length enriched CDNA library."
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 628)
Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R.,Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and Kim,Y.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTGCCTACTTCTTTCCCTTCTTCATGTGTACTACAAAATAGTCATTGCAATG 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAACTAAAAAAGAACTTTATTTTTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGATTCCTTAAGCGACCCTTTGGAACACTCTTATCAGGGAGGAGGAACTGCTCATT 384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    563 AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAATGAGAGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAACTAAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                              Korea Research Institute of Bioscience & Biotechnology 52 Eceun-dong Yuseong-gu, Daejeon 305-333, South Korea Tel: +82-42-860-4470 Fax: +82-42-860-4409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 628;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51.8%; Score 621.4; DB 4;
99.8%; Pred. No. 4.7e-141;
tive 0; Mismatches 1;
                                                                                                                                           21C Frontier Korean EST Project 2001
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue_type="Lymph node"
/cell_type="Epithelial"
/cell_line="SNU-216"
/lab_host="ToploF"
/clone_lib="S12SNU216"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="S12SNU216-56-F10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                  Email: yongsung@mail.kribb.re.kr
Plate: 56 row: F column: 10
High quality sequence stop:
Location/Qualifiers
                                                                                                                                                                                                                              Genome Research Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /sex="F"
                                                                                                                                                                                                  Contact: Kim YS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 622; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          383
                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                              TITLE
JOURNAL
COMMENT
                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DRIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM842132 628 bp mRNA linear EST 06-MAR-2002
K-EST0119473 S12SNU216 Homo sapiens cDNA clone S12SNU216-56-F10 5',
```

d

ò

셤 à g

a ò 9 ò 셤

à

```
638 bp mRNA linear EST 21-AUG-2002
5', mRNA sequence.
BQ943717.1 GI:22359195
EST.
kb size fraction (other fractions present in NIH_MGC_127 and NIH_MGC_128). Library created in the laboratory of T. Usdin, M.D., Ph.D. (NIMH, NIH). Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                  505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                           GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA 565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     204 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541 TIGGIGIGGICCGIIGAAGCCIIGGCCGAGGCGCGGCGGACGCIGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (bases 1 to 638)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                384 TCTGCCTACTTTCTCTTTCATGTTACTACAAAATAGTCATTGCAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           264 rccacerccricarrarrrerccacaceceacacecricarrrearrriccaaaarrcca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   144 GCGAATTIGIGAAAIGIAAACATCAIGGITTICCAIGGCGIGITCCAITIGAGAIGGCAIT
                                                                                                                                                                                                                                                                                                                                                                                                AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCAGCTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GIGAGGCCCGCAATIAGGGAAAAGAAGCTCTGGAAGCCCCACTITGCCAICTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCAGGTCCTTCATTATTTTGTCCACAGGCCAGAGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481 GCGAATTTGTGAAATGTAAACATCATGGTTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                       ö
                                                                                                                                                                                  Length 794;
                                                                                                                                                                            Query Match 51.8%; Score 621; DB 5; Length 79
Best Local Similarity 100.0%; Pred. No. 6e-141;
Matches 621; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGACGCGGGCGGAGGGC 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGACGCGGGCCGAGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 41
BQ943717/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="mixNa"
//mol_type="mixNa"
//db xref="laxon:866"
//clone="laxon:866"
//tissue_type="mixNa"
//tissue_type="mixed"
//tissue_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGENCOURT 10435041 NIH MGC 126 Homo sapiens cDNA clone INAGE:6552090 5', mRNA sequence.
                                                                                                    420
                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                       GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTTGTTAAGTAGCCTTTATCCCCA 144
           TIGGIGIGGICCGTIGAAGCCTIGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                   rccassrctrcarrarrirsrccasscsassesrcrrrrrsarrirsaaaaarcca 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I (Dases 1 to 794)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                       84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5.-AAGCAGTGGTATCAACGCAGAGTGGCCATTACGGCCGGG-3' and
5.-ATTCTAGAGGCCGAGGCGCCGACATG-dT(30)NN-3'. Full-length
enriched library was constructed using the Clontech
Creator SMANT kit and size-selected to contain the 0.5-1
                                                                                                                                                                                                                                                                                                                                              GCGAATTTGTGAAATGTAAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TIGETGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGAGCTGGGCGAGCTGGGCGAG
                                                                                                                                                                                                        GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTTATCCCCA
                                                                                                                                                                                                                                                                                                                  GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDNA Library Preparation: Michael Brownstein Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLCM2899 row: p column: 10
High quality sequence stop: 589.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .794
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: NCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGACGCGGGCGGAGGCGA 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGACGCGGCGGAGGCTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BU860855.1 GI:24045847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                      263
                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                             203
                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                       143
                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23
                                            323
                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BU860855/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
```

COMMENT

```
BM461859.1 GI:18510899
                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                AGENCOURT 6418411
5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        al Similarity
620; Conserv
                                                                                                                                                                                                                                            BM461859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local
                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                            RESULT 42
BM461859/c
                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                             /mod_type="makna"
/mod_type="makna"
/db xref="taxon:9606"
/clone="INAGE:6384795"
/tlssue_type="carcinoma, cell line"
/note="Organ: prostate; Vector: pOTB7; Site_1: XhoI;
/note="Organ: prostate; Vector: pOTB7; Site_1: XhoI;
/note="Organ: prostate; Vector: pOTB7; Site_1: XhoI;
/note="Organ: prostate; Cell line"
/note="organ: potential line"
/tlssue_type="cell"
/tlssue_t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCAGGTCCTTCATTATTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TIGGIGIGGICCGITGAAGCCITGGCCGAGGCGCGGCGGAGCCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          440 GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGGAGCGAACTGCTCATT 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 O GTGAGGCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             260 TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    200 GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCA 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      140 GCGAATTTGTGAAAATGTAAAACATCATGGTTTCCATGGGGGTGTTCCATTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TIGGIGGICGIGGAGCCTIGGCGCGGCGCGGCGGAGCCTGGGCGAGCGCTGGGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GGAACTAAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITACATITIGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                            þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
Tissue Procurement: DCTD/DTP

CDNA Library Preparation: Rubin Laboratory

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:

http://image.lln.gov

Plate: LLCM2580 row: g column: 04

High quality sequence stop: 637.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             51.7%; Score 620; DB 5; Length 638; 100.0%; Pred. No. 1e-140; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                    1. .638
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601 CTGGACGCGGGCGGAGAGG 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                620;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local
Matches 62
                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
```

```
898 bp mRNA linear EST 05-FEB-2002
_6418411 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:5533915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol type="mRNA"
/mol type="mRNA"
/db xref="taxon:9606"
/db xref="taxon:9606"
/clone="HALOB"
/lab_host="HHIOB" (phage-resistant)"
/clone=lib="NHH MGC_71"
/note="Organ: uterus; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: Salı; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 2.1 kb. "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo. I (bases 1 to 89). NIH-WGC http://mgc.noi.nih.gov/.
                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rømail.nih.gov
Tissue Procurement: ATC

cDNA Library Preparation: Life Technologies, Inc.

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM12219 row: i column: 20
High quality sequence stop: 625.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 AAGCTTATCTGGTATTTAACTTTTCTTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTACATTTGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        500 TITACATITGCTAAGIGTCCTGATCTGCTCATGAAATCCTTCTATGGGGAAGCTGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGAACTAAAAAAGAACTTTATTTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGGTTAGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGATICCTIAAGCGACCCTITGGGACAACICTIATCAGGGAGGAGCGAACTGCTCAIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4; Length 898;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        51.7%; Score 620; DB 4; Le
100.0%; Pred. No. 1.1e-140;
tive 0; Mismatches 0;
```

432 466 492 406 552 346

612 286 672 226 732 166 792 106 852 46

```
EST 18-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (Base 1 to 662)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: NI
585 ATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTC
                                                                                                                                                                                                                                                          TCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                       465 TCCATGAGTACTCTCAGGTCCTCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGA
                                                                                                                                                                                                                                                                                                                                                         493 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                      405 AATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCCGAGCTGGGCGAGCTGGACGCGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u> GGAGGCGCGCGGGGAGCGGGAAGCCTGGCGGGCGCTCGGCAGGCGCTCCCCCAGCCC</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    165 retricirciceceretricerececedeacrecedadecedeadecedeadecedeadece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          373 ATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA Library Preparation: Michael Brownstein Laboratory CDNA Library Preparation: Michael Brownstein Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.lln.gov
Plate: LLCM2991 row: column: 20
High quality sequence stop: 537.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             662 bp mRNA linear ESI
AGENCOURT 10520015 NIH_MGC_128 Homo sapiens cDNA clone
IMAGE:6701084 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45 TAAACTTCTCTTCAGTAGAACGGTCCTGCTCTCGAATATTTCAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BU934696.1 GI:24123515
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BU934696
                                                    313
                                                                                                                                                                                                                                                                                                                                                                                                                                                              553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              853
                                                                                                                                                                                                                                                        433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 44
BU934696/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                  ò
                                                                                                                                                                                           g
                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tissue_type="forioarctinoma"
/lab host="Dtiloa"
/l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  602404165F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:4541488 5', mRNA sequence.
                                                                                                    480
                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                       TTGGTGTGCGTTGAAGCCTTGGCCGAGGCGCGCGGCGACGCTGGGCGAGCTGGGCGAG 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Marting Institutes of health, mammailan Gene Collection (moc)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Arcor
CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://mage.llnl.gov
Plate: LLCM1220 row: b column: 17
High quality sequence stop: 635.
                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 645)
                          GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                          TTGGTGTGGTCCGTTGAAGCCTTGGCCGAGGCGCGGCGGACGCTGGGCGAGCTGGGCGAG
TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA
                                                                                                    GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                        GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                     GCGAATTTGTGAAATGTAAACATCGTGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (Dates 1 ... ...)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 619.8; DB 4; Length 645; Pred. No. 1.2e-140; 0; Mismatches 7; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4541488"
                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACGCGGGCGGAGAGG 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGACGCGGGCGGAGAGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG335338.1 GI:13141776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       51.7%;
larity 98.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . . 645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BG335338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          636;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S:
Matches 636,
                                                                                                                                                                                                                                                                                                                                                         80
  361
                                                  260
                                                                                                    421
                                                                                                                                                   200
                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                     140
                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 43
BG335338/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                    g
                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                 ò
                                                                                                                                    g
                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                       ð
  ò
```

þe

```
619 bp mRNA linear EST 30-JAN-2003
K-EST0218240 L18POOLIN1 Homo sapiens cDNA clone L18POOLIN1-27-A04
5', mRNA sequence.
CB158822
                                                                                                                                                                                                                                                                                                                                                                  Kim, N.S., Hahn, Y., Oh, J.H., Lee, J.Y., Ahn, H.Y., Chu, M.Y., Kim, R., Oh, K.J., Cheong, J.E., Sohn, H.Y., Kim, J.M., Park, H.S., Kim, S. and Kim, Y.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone lib="LighCOLin1"
/note="Organ: Liver; Vector: pT7T3-Pac; Site_1: EcoRI;
Site_2: Not!; The library was contributed by the Soares
laboratory and it was constructed acestribed by Bonaldo,
M.F., Lennon, G. and Soares, M.B. (1996), Genome Research
6(9): 791-806. RNA was prepared from harvested cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCTGGAAGCCCACTTTGCCATCTCTACACTGGTCCAGGTCCTTCATTATTTGTCCACA 387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAACTCTTATCAGGGAGGAGGGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTC 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGTGTACTACAAAATAGTCATTGCATGCAATGGTGAGGCCCGCAATTAGGGAAAAGAAG 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGTGTACTACAAATAGTCATTGCATGCTGAGGCCCCGCAATTAGGGAAAAGAAG 320
                                                                                                                                                                                                                                                                            Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 619)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGGCAAGGGGATGCAAACAATACAAAATCAAAAGCTTATCTGGTATTTAACTTTTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGCAAGGGATGCAAACAATACAAAAATCAAAAGCTTATCTGGTATTTAACTTTTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCATGAAATCCTTCTATGGGGGAAGCTGTGGGGCAGATTCCTTAAGCGACCCTTTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAACTCTTATCAGGGAGGAGCGAACTGCTCATTTCTGCCTACTTCTTTCCCTTCTGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                                                                                                                               21C Frontier Korean EST Project 2001
Unpublished (2002)
Contact: Kim YS
Genome Research Center
Korea Research Institute of Bioscience & Biotechnology
52 Eceun-dong Yuseong-gu, Daejeon 305-333, South Korea
Fax: +82-42-860-44709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             51.6%; Score 619; DB 6; Length 619; 100.0%; Pred. No. 1.8e-140; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /cell line="SNU-354+Cho-CK+Choi-CK+HLK-3"
/lab_host="Topl0F'"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="L18POOL111-27-A04"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: yongeung@mail.kribb.re.kr
Plate: 27 row: A column: 04
High quality sequence stop: 619.
Location/Qualifiers
                                                                                                                                                                     CB158822.1 GI:28144948
                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 culture."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .619
                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 619; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               328
RESULT 45
CB158822/c
LOCUS
                                                                                     DEFINITION
                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
              /clone="IMAGE:6701084"
/tissue type="mixed (pool of 40 RNAs)"
/lab_host="MIMAGE:6701084"
/tissue type="mixed (pool of 40 RNAs)"
/lab_host="MINH MGC 128"
/clone_lib="MINH MGC 128"
/clone_ste="Weetor: pDNR-LIB; Site_1: Sfil (ggccattatggcc);
Site_2: Sfil (ggccgcctcggcc); Double-stranded cDNA was prepared from a pool of 40 cell line poly4+ RNAs (bladder-2% blood - 33.4%, brain - 5.6%, breast - 12.5%, colon-4%, connective tissue - 1.4%, eye - 1%, intestine - 2.6%, kidnney - 2.2%, liver - 5.7%, lung - 10.8%, NK-cell - 5.2%, ovary - 4%, pharynx - 2.5%, prostate - 4.3%, salivary gland - 1.3%, and skin - 2.3%). 5' and 3' adaptors were used in cloning as follows:
5'-AAGCAGTGGTATCAACGCAGAGTGGCCATTACGGCCGG-3' and 5'-AAGCAGTGTATCAACGCAGAGTGGCCATTACGGCCGG-3' and 5'-AAGCAGTGTATCAACGCAGAGTGGCCATTACGGCCGG-3' and 5'-AATCTAGAGGCCGACAGTGCGACATGGTGGCGG-10)Nn-3'. Full-length enriched library was constructed using the Clontech Creator SNART kit and size-selected to contain the > 2 kb size fraction (other fractions present in NIH MGC 126 and NIH MGC 127). Library created in the laboratory of T. Ushin, M.D., Ph.D. (NIMH, NIH). Note: this is a NIH_MGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAACTAAAAAGAACTTTATTTATTGAGGGCAAGGGGATGCAAACAATACAAAAATCAA 565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITACATITGCTAAGTGTCCTGATCTGCTCATGAAATCCTTCTATGGGGGAAGCTGTGGG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITACATITIGCIAAGIGICCIGATCIGCICATGAAATCCITCIAIGGGGGAAGCIGIGGG 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCAGGTCCTTCATTATTTTGTCCACAGCCAGAGGGTCTTTTTGATTTTCCAAAAATCCA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tregreregrecerrena accerrence and englishment and englishment engl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    564 AAGCITATCIGGTATITAACTITITCTITCTCGTGTTGTCAAATGAGAGTTAGATITIAIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGAGGCCCGCAATTAGGGAAAAGAAGCTCTGGAAGCCCACTTTGCCATCTCTACACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGAACTCCTTTTCCATGAGTACTCTCAGGTCCTCCTTTGTTAAGTAGCCTTTATCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAACTAAAAAAGAACTTTATTATTATTGAGGGCAAGGGGATGCAAACAATACAAAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCTTATCTGGTATTTAACTTTTCTTTCTCTGCTTGTCAAATGAGAGTTAGATTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGATTCCTTAAGCGACCCTTTGGGACAACTCTTATCAGGGAGGAGCGAACTGCTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              144 GCGAATTTGTGAAATGTAAACATCATGGTTTCCATGGCGTGTTCCATTTGAGATGGCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ٥;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 662;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 619.4; DB 5;
Pred. No. 1.4e-140;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACGCGGGCGGAGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGACGCGGGGGGAGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             620; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Library.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
```

ö

Gaps

147

500 207

960

87

440

δ	388 GCCAGAGGGTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTCCATGAGTACTC 447
q	259 GCCAGAGGCTCTTTTTGATTTTCCAAAAATCCAGGGAACTCCTTTTTCCATGAGTACTCT 200
λō	448 AGGICCTCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTGTGAAATGTAAACATCATG 507
qq	199 AGGICCTCCTTTGTTAAGTAGCCTTTATCCCCAGCGAATTTGTGAAATGTAACATCAIG 140
ζ	508 GTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGGTCCGTTGAAGCCTTGGCC 567
ਰੂ	139 GTTTCCATGGCGTGTTCCATTTGAGATGGCATTTTGGTGTGGGTCCGTTGAAGCCTTGGGCC 80
ò	568 GAGGCGCGGCGGACGCTGGGCGAGCTGGGCGGGGGGGGGG
đ	79 GAGGCGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
λõ	628 GGCGGCCTGTCC 646
qa	19 GGGGGCTGTGGCCTTCC 1
Search o Job time	Search completed: August 18, 2005, 06:28:58 Job time : 3779 secs